Louisiana Pacific Corp Arcata
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ecology and environment, inc.

160 SPEAR STREET, SAN FRANCISCO, CALIFORNIA 94105, TEL. 415/777-2811

International Specialists in the Environment

MEMORANDUM

TO: Paul La Courreye, EPA Region XI Site Screening Coordinator

FROM: Karen Ladd, Ecology and Environment, Inc. KML

DATE: August 31, 1990

SUBJECT: Completed Work

cc: Marcia Brooks, E & E, Inc.

Attached is the following completed:

PA___ PA Review___ SSI___ LSI___ SIRe___

Other PA Reevaluation

Site Name: Louisiana-Pacific Corporation

EPA ID #: CAD980673578

City, County: Arcata, Humboldt County

State Recommendation:
(for Reviews only)

FOR EPA USE ONLY

CERCLIS Lead: F

PA-2 Complete
HSSI
Pal 9.12-90

hb/lp/cwm

SIF from 2 9/17/90

entered 9/14/90 G.S.

(1859)

ecology and environment, inc.
160 SPEAR STREET, SAN FRANCISCO, CALIFORNIA 94105, TEL. 415/777-2811
International Specialists in the Environment

PRELIMINARY ASSESSMENT REEVALUATION

unsigned

SUBMITTED TO: Paul La Courreye,
EPA Region IX Site Assessment Manager

PREPARED BY: Helena Brykarz, Ecology and Environment, Inc. HB

THROUGH: Su-san Wen, Ecology and Environment, Inc. SW

DATE: August 30, 1990

SITE: Louisiana-Pacific Corporation,
Highway 299
Arcata, Humboldt County, California
dated October 13, 1982

TDD#: F9-9005-023

EPA ID#: CAD980673578

PROGRAM ACCOUNT#: FCA0333PAA

FIT REVIEW/CONCURRENCE: James M. James 9/10/90

cc: FIT Master File
Don Plain, California Department of Health Services

INTRODUCTION

Under Technical Directive Document number F9-9005-023, Ecology and Environment, Inc.'s Field Investigation Team (FIT) has been tasked to reassess all Preliminary Assessments (PAs) in the Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) with "active" or "pending" status according to guidelines established to implement the Superfund Amendments and Reauthorization Act (SARA). During the course of this reassessment process, PAs were identified that contained insufficient information to allow an accurate reassessment. FIT has been subsequently directed to reevaluate and upgrade these PAs as needed to ensure that an accurate response determination is made.

The strategy for determination of further action under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) is based solely on each site's potential to achieve a score high enough on the proposed revised Hazard Ranking System (rHRS) for inclusion on the National Priorities List (NPL). This strategy is intended to identify

those sites posing the highest relative risk to human health or the environment. All other sites needing remedial or enforcement follow-up will be referred to the states or an appropriate federal agency.

The following is a summary of FIT's findings with regard to this site.

SUMMARY

Louisiana-Pacific Corporation (LP) operates a particle board facility, also known as Humboldt Flakeboard or Arcata Particleboard, in Arcata, California. The facility is situated off of California State Highway 299, in Township 6 North, Range 1 East, Section 16, Humboldt Baseline and Meridian (Latitude: 40° 53′ 51", Longitude: 124° 04′ 22"). It is located in Arcata Bottoms, near the western base of Fickle Hill (see Figure 1, Site Location Map). The company's regional headquarters is nearby in Samoa, California (1,2,3).

LP has manufactured particle board at the Arcata facility since the 1970s. Prior to the 1970s, the facility was owned by Humboldt Flakeboard which had similar operations (4). In 1989, LP produced 120 million square feet of 0.75-inch basis particle board (5). Urea-formaldehyde and phenolic resins are used as adhesives in the manufacture of particle board (2). The facility stores fine-grained wood chips and saw dust in piles within the building (4). These raw materials are fed into two triple-pass, rotary driers (5). The remaining processes are unknown to FIT, due to the unavailability of the facility contact (6).

Emissions from the drying process consist mainly of wood fines and hydrocarbons. These emissions accumulate on the ground surface and surface water surrounding the facility. The facility has a permit for particulate emissions from the North Coast Unified Air Quality Management District (AQMD) (5). Stormwater runoff mixes with this material and accumulates variable concentrations of ammonia, formaldehyde and phenol. This runoff discharges to an apparently unlined, adjacent pond. Noncontact cooling water also empties into this pond. The facility has a National Pollution Discharge Elimination System (NPDES) permit for the discharge into the pond. All other wastewater streams at this facility are discharged to the City of Arcata sewage treatment plant. These wastewater streams include: boiler blowdown, washwaters containing urea, formaldehyde, phenol, wax, latex sealer and other glue wastes, and effluent from the wet scrubber. Wet scrubber sludge is disposed of at an off-site landfill (2).

Three apparent problems have been identified by FIT at this site. AQMD conducted emissions sampling in 1988 and discovered that the facility exceeded state particulate standards. AQMD has also received complaints about the brown-blue haze which is caused by the drier emissions (5). The second apparent problem is the presence of elevated levels of formaldehyde in the pond effluent. This contamination was detected in 1990 by the California Regional Water Quality Control Board (RWQCB) in pond-overflow samples (4). The third apparent problem is potential polychlorinated biphenyl (PCB) contamination. In 1982, the U.S. Environmental Protection Agency (EPA) conducted a Toxic Substances Control Act (TSCA) investigation at the site. The agency discovered that

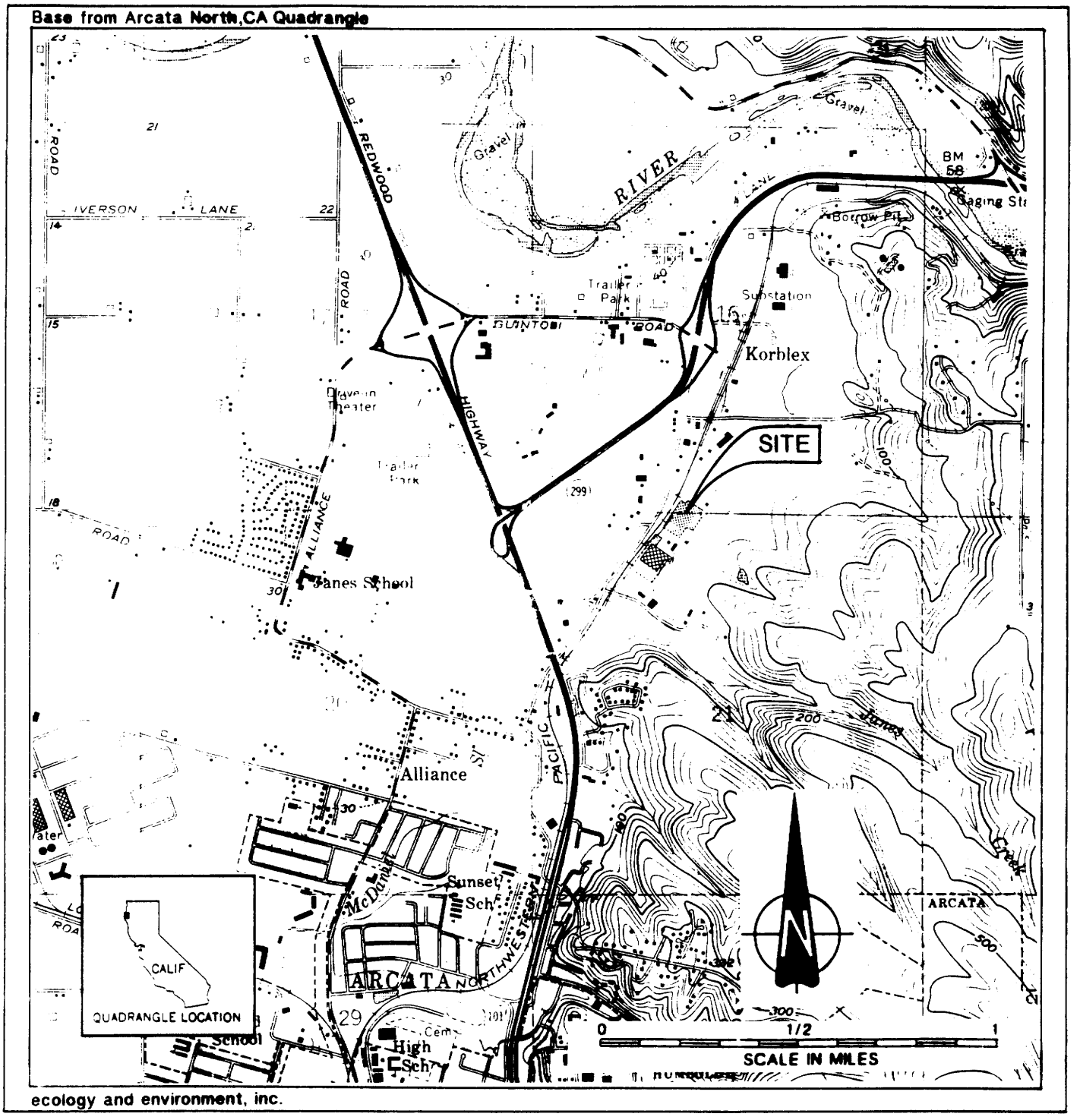

Figure 1: SITE LOCATION MAP

LOUISIANA - PACIFIC CORPORATION

HIGHWAY 299

ARCATA, CALIFORNIA 95521

the facility had a problem with one electrical transformer that leaked material onto the concrete surface in the building. EPA issued a potential violation for a PCB spill [TSCA, Subpart B, Section 761.10(d)(i) and Subpart C, Section 761-20(c)(2)(ii)] (7). No further information was available to FIT regarding the spill.

The facility is permitted by AQMD to emit no more than 40 pounds per hour (pph) of particulate matter from its core and surface driers (5). Recently, AQMD approved a variance request that temporarily permits higher emissions while the facility improves its air pollution control system (8).

The facility has an NPDES permit from RWQCB which provides waste discharge requirements for storm water and noncontact cooling water from the facility into the pond. RWQCB prohibits the discharge of process wastewaters to the pond (2). Although, the facility is not listed in the EPA Resource Conservation Recovery Act (RCRA) data base, it submitted a notification of Hazardous Waste Activity to the EPA in 1985. Also, the facility is included in the June 25, 1990 EPA Facility Index System (FINDS) as being listed in the Hazardous Waste Data Management System (HWDMS) (9).

The 1988 air emissions sampling conducted by AQMD indicated that 45 pph of particulate matter was emitted from the driers. From 1984 to 1989, the facility operated the driers for 42,336 hours (5). In 1990, the facility excavated 1,300 cubic yards of drier emissions from the pond (3). Sampling of the material by the facility indicated the presence of formaldehyde at 1.5 milligrams per kilogram (mg/kg) with a detection limit of 0.1 mg/kg; ammonia at 28 micrograms per kilogram (µg/kg) with a detection limit of 1.0 µg/kg. No phenols were detected above the detection limit of 10 µg/kg (4).

The facility is situated within the Arcata Plain, a regional alluvial plain which consists of clay, sand, and gravel. There is no clay layer in the area that would prevent the downward migration of groundwater. Beds of coarse sand and gravel yield water readily to wells, and the groundwater is very shallow. Within 1 mile of the site, the depth to groundwater in irrigation wells is from 12 to 18 feet below ground surface (bgs) (10). The groundwater gradient is seaward, flowing in a westerly direction (10). The annual net precipitation is 23.94 inches (11,12).

The nearest drinking water wells are private domestic wells located 0.5 to 1 mile northeast of the site (13). The population served by these wells is not known to FIT, but it is probably very small due to the low housing density in the area. Drinking water used by the residents of Arcata and the surrounding area is mostly from four Ranney wells operated by Humboldt Bay Municipal Water District. Ranney wells are large lateral collectors that draw water from a buried channel consisting of gravel deposits underneath the Mad River. The wells are located approximately 1 to 2 miles northeast of the site. These wells are interconnected and serve approximately 60,000 people. There is no readily available alternative source of drinking water in the area (14,15).

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No sampling is known to FIT that would indicate a release of contaminants to groundwater (16). However, a contaminant releases have ocurred on site which could reach groundwater given the high infiltration rate of the soil.

The facility is less than 100 feet from the 20-acre storm water pond which was formerly used for floating logs (1,2,4). The pond overflows intermittenly to a tributary to Janes Creek. Overflow occurs predominantly in the winter months (2). Janes Creek is an open creek for less than 1 mile before it reaches Alliance Avenue, where it submerges. It flows mostly underneath the city of Arcata for more than 3 miles (1,17). The creek then becomes part of the estuaries draining into Humboldt Bay. Humboldt Bay extends for approximately 12 miles before meeting the Pacific Ocean (1). The site is not within a floodplain (18). The 2-year, 24-hour rainfall is 3.5 inches (19).

In 1990, RWQCB sampled the pond overflow and detected formaldehyde at 57 milligrams per liter (mg/L) in the pond. Formaldehyde is present in background streams as well; however, no clear observed release to surface water has been identified. It is possible that LP air emissions containing formaldehyde could have contaminated the surrounding streams. No other facility in the area is known to use formaldehyde (4).

There is no drinking water use of the downstream surface waters from the site. Beneficial uses of Janes Creek include agricultural water supply, water recreation, and cold freshwater habitat. Janes Creek is a sensitive environment because it is used for fish spawning and migration (2,17). Before Janes Creek submerges below ground at Alliance Avenue, it is used for recreational fishing. It is estimated that 5,000 pounds of coastal cutthroat trout are produced in Janes Creek per year. The creek has a flow rate of 2 cubic feet per second (cfs) during the summer. Humboldt Bay also is used for recreation and fishing. The bay has an estimated commercial fish production of 480,000 pounds per year. The fish include chinook salmon and silver salmon (17).

There are numerous sensitive environments and species within 4 miles of the site. The northern coastal salt marsh is located approximately 3 miles southwest of the site. Humboldt Bay National Wildlife Refuge is also approximately 3 miles south of the site. Approximately 3 miles south of the site are habitats used by candidates for the federal endangered species list. These include Humboldt Bay gumplant (Grindelia stricta subspecies Blakei), tidewater goby (Eucyclogobius newberryi), western lily (Lilium occidentale), Humboldt Bay owl's-clover (Orthocarpus castillejoides variety Humboldtiensis), and Point Reyes bird's-beak (Cordylanthus maritimus subspecies Palustris). The double crested cormorant (Phalacrocorax auritus), a rare species, has been observed approximately 4 miles south of the site (1,20). Janes Creek, which is approximately 0.25 miles south of the site, is a critical habitat for fish migration and spawning (2). The northern spotted owl (Strix occidentalis), which is designated by the federal government as a threatened species exists in the area (21). Since the habitat requirements for the spotted owl are large, its habitat may be found as close as 0.25 miles from the site. Refer to Table 1 for the sensitive environments along Janes Creek and Humboldt Bay (2,20,22).

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Table 1

SENSITIVE ENVIRONMENTS IN JANES CREEK AND HUMBOLDT BAY

Environment/Species	Location	Miles Downstream	Status
Spawning habitat for coastal cutthroat trout	Janes Creek	0.25	-
Migratory habitat for coastal cutthroat trout	Janes Creek	0.25	-
Northern coastal salt marsh	North Humboldt Bay	3	S2
Humboldt Bay National Wildlife Refuge	Northeast Humboldt Bay	3	-
North seagrass bed	North Humboldt Bay	6	S1
Great blue heron (*Ardea herodras*)	Indian Island	9	S2
Great egret (*Casmerodius albus*)	Indian Island	9	S2
California clapper rail (*Rallus longirostris obsoletus*)	Indian Island	9	FE, SE
Snowy plover (*Charadrius alexandrinus Nirosus*)	Humboldt Bay Spit		FC
Bank swallow (*Riparia riparia*)	Eureka	9	S2
Menzie's wallflower (*Erysimum menziesii*)	North of Fairhaven	11	FC, SE
	East of Mad River Slough	6	
	Hunt Farm	unknown	
	East of Samoa	9	

hb/lp/tbls

Table 1 (Cont.)

SENSITIVE ENVIRONMENTS IN JANES CREEK AND HUMBOLDT BAY

Environment/Species	Location	Miles Downstream	Status
Humboldt Bay owl's-clover (Orthocarpus castillejoides variety Humboldtiensis)	Samoa, Woodley Island Elk River Slough, South of Manila, 2nd and 3rd Street Slough, north of Samoa Bridge, Arcata Bay, Salt Marsh along east edge of Humboldt Bay, Humboldt Bay near Bayside Cutoff	from 3 to 13	FC
Point Reyes bird's-beak (Cordylanthus maritimus subspecies Palustris)	Eureka (2 locations), Samoa, Highway 255 and Vance Avenue, Manila, across from Eureka Airport, near Arcata, East side of Elk River Spit, Arcata Salt Marsh	from 3 to 13	FC
Tidewater goby (Eucyclogobius newberryi)	northeast shore of Humboldt Bay, near Jacoby Creek in Humboldt Bay	3 3	FC
Western lily (Lilium occidentale)	Bayside Cutoff, near Bayside, near Humboldt Bay	4 3	FC, SE
Humboldt Bay gumplant (Grindelia stricta subspecies Blakei)	Arcata Salt Marsh, adjacent to Eureka Airport	3 6	FC

FE = Federally designated endangered species
FC = Federally proposed endangered species
SE = State listed endangered species
S1 = State Natural Heritage Program, ranked as critically imperiled in the state (5 or fewer occurrences).
S2 = State Natural Heritage Program, ranked as critically imperiled in the state (21 to 100 occurrences).

hb/lp/tbls

The facility is situated within an industrial area, bordered by forested mountains to the east and residential areas to the west (1). There are 93 employees at the facility, and the population within 4 miles of the site is approximately 23,374 (16,23).

There do not appear to be any residents on site at the LP facility. Because the facility operates 24 hours per day, it is constantly generating drier emissions at an approximate rate of 45 pph, which accumulate on the ground surface (5). The pond, which is adjacent to the facility, is not fenced and is accessible to the public, particularly from the eastern side (4).

SUMMARY OF rHRS CONSIDERATIONS

Lousiana-Pacific Corporation operates a particle board facility in Arcata, California. In 1988, the North Coast Air Quality Management District sampled the facility's drier emissions, and discovered that the facility exceeded state levels for particulate emissions. The emissions contain wood fines, ammonia, formaldehyde, and phenol, which settle on the ground and are carried to the adjacent pond by rainfall runoff. Additionally, the California Regional Water Quality Control Board sampled the pond and background streams, and detected high levels of formaldehyde which may be a result of the drier emissions. In 1982, the EPA conducted a Toxic Substances and Control Act investigation, and issued a violation for a suspected PCB spill.

The significant rHRS factors associated with the site are as follow:

- o Potentially large waste quantity;
- o Distance to the nearest drinking water well is approximately 0.5 miles;
- o Groundwater within 4 miles of the site provides drinking water for approximately 60,000 people;
- o Large numbers of sensitive environments and species are present within 4 miles of the site;
- o The facility has exceeded its air discharge requirements; and
- o There is a high potential for a release of particulate contaminants to groundwater and surface water.

EPA RECOMMENDATION

	Initial	Date
No Further Remedial Action Planned		
High-Priority SSI	[signature]	9.12.90
Medium-Priority SSI		

hb/lpc/predo

REFERENCES

1. U.S. Geological Survey, map of Arcata North, California, 7.5-minute series, 1959 (photorevised 1972).

2. California Regional Water Quality Control Board (RWQCB), Waste Discharge Requirements for Louisiana-Pacific Corp., January 30, 1986.

3. Smith, Elizabeth, Louisiana-Pacific Corp., to Benjamin Kor, RWQCB, letter re: status of environmental projects, May 7, 1990.

4. Alpert, Mark, RWQCB, and Helena Brykarz, Ecology and Environment, Inc.'s Field Investigation Team (E & E FIT), telephone conversation, June 8 and July 3, 1990.

5. North Coast Unified Air Quality Management District (AQMD), Staff Report for Variance Request by Louisiana-Pacific Corp., Arcata, California (no date).

6. Receptionist, Louisiana-Pacific Corp., and Helena Brykarz, E & E FIT, telephone conversation, June 6 and 25, 1990.

7. U.S. EPA Region IX, Toxic Substances Control Act Site Inspection Report, for Louisiana-Pacific Corp., Arcata, California, and Louisiana-Pacific Corp., Samoa, California, March 12, 1982.

8. Herr, Leonard, AQMD, and Helena Brykarz, E & E FIT, telephone conversation, June 6, 1990.

9. U.S. EPA Resource Conservation and Recovery Act (RCRA) Database, Dated May 8, 1990.

10. U.S. Geological Survey, Water Supply Paper 1470, Geology and Ground-Water Features of the Eureka Area, Humboldt County, California, Washington, D.C., U.S. Government Printing Office, 1959.

11. Federal Register, Vol. 53, No. 247, Proposed Rules, 52029-52030, December 23, 1988.

12. U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Environmental Satellite Data and Information Service, National Climatic Data Center, Comparative Climatic Data for the United States Through 1985, Nashville, TN, Observation Station #378.

13. California Department of Water Resources, Master Listing of Well Logs, March 16, 1990.

14. Bolli, Art, Humboldt Bay Municipal Water District, and Helena Brykarz, E & E FIT, telephone conversation, June 6, 1990.

hb/lp/ref

REFERENCES (CONT.)

15. Shamp, Harold, Humboldt Bay Municipal Water District, and Helena Brykarz, E & E FIT, telephone conversation, June 25, 1990.

16. City of Arcata, Department of Community Development, State of the City Report, Arcata, Califorina, 1990.

17. Preston, Larry, California Department of Fish and Game, and Helena Brykarz, E & E FIT, telephone conversation, June 19, 1990.

18. Tuttle, Don, Sutter County Public Works, and Helena Brykarz, E & E FIT, telephone conversation, June 25, 1990.

19. U.S. Department of Commerce, NOAA, National Weather Service, NOAA Atlas II, Precipitation-Frequency Atlas of the Western United States, Volume XI-California, p. 37, Silver Springs, Maryland 1973.

20. California Department of Fish and Game, Natural Diveristy Data Base, Arcata North, Arcata South, Eureka Quadrangles, April 1, 1989.

21. Spangle, Steve, U.S. Fish and Wildlife Service, and Helena Brykarz, E & E FIT, telephone conversation, June 25, 1990.

22. Northern California Atlas and Gazetteer, Freeport Maine: De Lorne Publishing Company, 1986.

23. U.S. EPA, Office of Toxic Substances, Graphical Exposure Modeling System, March 1989.

hb/lp/ref

PA/SI CONTACT LOG

Facility Name: Louisiana-Pacific Corp.
Facility ID: CAD980673578

Name	Affiliation	Phone #	Date	Information
Lia Sullivan	City of Arcata, Community Development	707-822-5955	6/5/90	She will send a map with the location of the facility and a State of the City Report.
Leonard Herr	North Coast Unified Air Quality Management District (AQMD)	707-443-3093	6/6/90	See Contact Report.
Brian Cox	Humboldt Co. Environmental Health Division	707-445-6215	6/6/90	The agency does not do any PCB inspections. There is no information on the facility regarding underground storage tanks or water quality problems. Try California Regional Water Quality Control Board (RWQCB) or California Department of Health Services (DOHS).
Joann Knight, Duty Officer	DOHS, Emeryville	540-3739	6/6/90	The facility is not on any list for investigation. Call file room.
Doris Cruz	DOHS File room	540-3738	6/6/90	No file exists for Louisiana-Pacific, Arcata; Call the project officer: Daisy Lee at 540-3933.
Art Bolli	Humboldt Bay Municipal Water District	707-443-5018	6/6/90	See Contact Report.
Receptionist	Louisiana-Pacific Corp.	707-443-7511	6/6/90	Liz Smith was not available. Left message.
Daisy Lee	DOHS, Emeryville	415-549-3933	6/7/90	She could not find any information on the facility.

hb/lp/clcr

PA/SI CONTACT LOG (Cont.)

Facility Name: Louisiana-Pacific Corp.
Facility ID: CAD980673578

Name	Affiliation	Phone #	Date	Information
Mark Alpert	RWQCB	707-576-2220	6/8/90	See Contact Report.
Steve Spangle	US Fish and Wildlife Service	916-978-4866	6/11/90	See Contact Report.
Larry Preston	California Department of Fish and Game	707-445-6493	6/19/90	See Contact Report.
Receptionist	Louisiana-Pacific Corp.	707-443-7511	6/25/90	Liz Smith was not available. Left message.
Ralph Scott	California Department of Water Resources (DWR)	916-527-6530	6/25/90	See Contact Report.
Don Tuttle	Sutter County Public Works	707-445-7741	6/25/90	Flooding of the site is extremely rare. The site is not even within a 500-year floodplain.
Steve Spangle	US Fish and Wildlife	916-987-4866	6/25/90	See 6/11/90 Contact Report.
Glen Pierson	DWR	916-525-6530	6/25/90	See Contact Report.
Harold Shamp	Humboldt Bay Municipal Water District	707-822-2918	6/25/90	See Contact Report.
Mark Alpert	RWQCB	707-576-2220	7/3/90	See Contact Report.

hb/lp/clcr

CONTACT REPORT

AGENCY/AFFILIATION: Humboldt Bay Municipal Water District		
DEPARTMENT:		
ADDRESS/CITY: P.O. Box 95, Eureka		
COUNTY/STATE/ZIP: Humboldt, California 95501		
CONTACT(S)	**TITLE**	**PHONE**
1. Art Bolli	Plant Manager	707-443-5018
2.		
E & E PERSON MAKING CONTACT: Helena Brykarz		**DATE:** 6/6/90
SUBJECT: Groundwater wells		
SITE NAME: Louisiana-Pacific Corp.		**EPA ID#:** CAD980673578

The water purveyor has 4 Ranney wells that pump drinking water from the underflow of the Mad River. Approximately 60,000 people are served by these wells, which are probably within 4 miles of the site. The wells are between 60 to 80 feet deep below ground surface, and are within an unconfined aquifer. The depth to groundwater is the same as the level of the Mad River.

However, there are other private wells which are closer to the facility. Call the Dept. of Water Resources, Ralph Scott, for well location information.

hb/lp/clcr

CONTACT REPORT

AGENCY/AFFILIATION: North Coast Unified Air Quality Management District		
DEPARTMENT:		
ADDRESS/CITY: 5630 S. Broadway, Eureka		
COUNTY/STATE/ZIP: Humboldt, California 95501		
CONTACT(S)	**TITLE**	**PHONE**
1. Leonard Herr		707-443-3093
2.		
E & E PERSON MAKING CONTACT: Helena Brykarz		**DATE:** 6/6/90
SUBJECT: Violations		
SITE NAME: Louisiana-Pacific Corp.		**EPA ID#:** CAD980673578

Louisiana-Pacific has permits for 1 surface dryer, and 3 core dryers. The facility was in violation of air quality standards in November 1989, for emitting particulate wood fines above the permitted level. The facility is currently under a variance for the wood dryer, which allows the site to emit higher particulate levels while the site is being reviewed. Mr. Herr will send a summary report to FIT.

hb/lp/clcr

CONTACT REPORT

AGENCY/AFFILIATION: California Regional Water Quality Control Board (RWQCB)		
DEPARTMENT: North Coast Region		
ADDRESS/CITY: 1440 Guerneville Road, Santa Rosa		
COUNTY/STATE/ZIP: California 95403		
CONTACT(S)	**TITLE**	**PHONE**
1. Mark Alpert		707-576-2220
2.		
E & E PERSON MAKING CONTACT: Helena Brykarz		**DATE:** 6/8/90 7/3/90
SUBJECT: Violations		
SITE NAME: Louisiana-Pacific Corp.		**EPA ID#:** CAD980673578

6/8/90:

The facility has a permit with RWQCB for discharging wastewater into the pond. Louisiana-Pacific is at a higher elevation than the pond. Wastewater overflows into the pond when the sump has too much water in it. Normally, the facility discharges wastewater into a clarifier, and the resulting sludge is sent to a landfill.

From the pond, there are drainage channels which discharge into Janes Creek, which flows though culverts underneath the city of Arcata, and becomes part of the estuaries emptying into Humboldt Bay. There are no beneficial uses of Janes Creek; it is used mostly for road drainage. There are fishing and recreational uses of Humboldt Bay.

RWQCB monitors the surface water and sediment from the pond (some tests monthly, other tests quarterly). It tests for pH, BOD, NFR, bioassays, phenols, formaldehydes, etc. Sampling has detected high levels of formaldehyde in the pond (approximately 10 to 57 milligrams per liter). However, background levels in the surrounding stream also indicated increase levels of formaldehyde. Formaldehyde may have been released to the other streams due to the air emissions from the facility. RWQCB has not taken any enforcement actions since a clear observed release has not been identified. Some of the formaldehyde present could be from natural biological changes taking place in the pond. The pond was once used for floating logs. Approximately 15 years ago, the facility stopped floating logs in it and thus, stopped maintaining the pond. As a result, the pond has become totally filled with vegetation. There is no open water. It is just a marsh with decaying logs and other pieces

of wood in the substrata. There used to be a stream that connected to the northern part of the pond, but it is now cut-off, so there is not much flow in the pond.

The facility is in the process of making major changes to curtail its air emission. Louisiana-Pacific has had problems with air emissions; not only with stack emissions but through blowing dust. Louisiana-Pacific imports fine-gained wood chips and saw dust to manufacture particle boards. While this material is stored inside buildings, it is moved around. The wind may carry the material through large doors in the building.

The surrounding area is predominantly rural. The facility is within an industrial park. There are two or three mills neighboring the pond, however, they are simply saw mills, discharging bark and saw dust as waste. The other mills do not use the chemicals that Louisiana-Pacific uses. There are homes to the east on a hill overlooking Arcata Bottoms where Louisiana-Pacific is located. These homes are in the direction of winds carrying particulate matter. There are also homes to the west of the facility. The city is interested in developing more of an industrial park in the vicinity of Louisiana-Pacific. Traditionally, the area consisted mostly of mills, some of which have closed.

There are no on-site monitoring wells. The groundwater locally in Arcata Bottoms is very shallow.

Humboldt Bay is at sea level. RWQCB has not been concerned with groundwater contamination, only surface water.

Mr. Alpert was not aware of any PCB contamination.

7/3/90:

I asked Mark Alpert for the report on the surrounding streams that are contaminated with formaldehyde. He couldn't find such a report. Apparently, some sampling was done but no report was written. He didn't have the sampling data either.

The analysis of the material excavated from the pond, which was referred to in Liz Smith's letter, is as follows:

	Units	A	B	C	Detection Limit
Formaldehyde	mg/kg	1.5	0.7	0.22	0.1
Ammonia soil	µg/kg	2.0	28.0	3.1	1.0
Phenols	µg/kg	ND	ND	ND	10.0
Organic matter	%	37	98	34	

The sampling location and methods used by Louisiana-Pacific are also not known by RWQCB.

hb/lp/clcr

The pond is very accessible to the public. Not necessarily from the side where the mills are, but on the east side where there is a PG&E right-of-way. He believes that there is a City of Arcata water main that passes this way. There are no fences around the pond.

The front of the facility may be fenced. The plant operates 24 hours per day. It's conceivable that one could get to the pond through Louisiana-Pacific's property.

The facility has had several name changes. It has been owned by Louisiana-Pacific since the 1970s. Prior to that, it was known as Humboldt Flakeboard which had similar operations.

RWQCB has aerial photographs of the facility in the 1970s before the dike that separates the ponds was built. Prior to the dike, the water levels were higher than they are currently.

The facility has just completed installing a new air pollution control system last week.

RWQCB has files available on the facility.

hb/lp/clcr

CONTACT REPORT

AGENCY/AFFILIATION: US Fish and Wildlife Service		
DEPARTMENT:		
ADDRESS/CITY: 2800 Cottage Way, Room 1823		
COUNTY/STATE/ZIP: Sacramento, California 95825-1846		
CONTACT(S)	**TITLE**	**PHONE**
1. Steve Spangle		916-978-4866
2.		
E & E PERSON MAKING CONTACT: Helena Brykarz		**DATE:** 6/11/90 6/25/90
SUBJECT: Spotted owl status		
SITE NAME: Louisiana-Pacific Corp.		**EPA ID#:** CAD980673578

6/11/90:

There are three subspecies of the spotted owl (Strix occidentalis). The California spotted owl is a candidate (2) federal endangered species. It has no special status in the state of California, other than being a sensitive species. The northern spotted owl and the Mexican spotted owl are both proposed federal endangered species.

6/25/90:

The northern spotted owl will officially be a federally designated threatened species on July 23, 1990. The southern extent of its coastal range is the Marin Headlands, north of San Francisco.

hb/lp/clcr

CONTACT REPORT

AGENCY/AFFILIATION: California Department of Fish and Game		
DEPARTMENT:		
ADDRESS/CITY: 619 2nd Street, Eureka		
COUNTY/STATE/ZIP: Humboldt, California 95501		
CONTACT(S)	**TITLE**	**PHONE**
1. Larry Preston	Fisheries Biologist	707-445-6493
2.		
E & E PERSON MAKING CONTACT: Helena Brykarz		**DATE:** 6/19/90
SUBJECT: Fish catch		
SITE NAME: Louisiana-Pacific Corp.		**EPA ID#:** CAD980673578

The Humboldt Fishing Council had a trapping program around Fresh Water Creek in Humboldt Bay. They estimated that there are approximately 30,000 silver salmon annually at that location.

The city of Arcata had a trapping program in Humboldt Bay near Jolly Giant Creek. An estimated 5,000 to 10,000 chinook salmon are present annually.

In 1979, the estimated population at Janes Creek below the tailings pond indicated 25 to 33 coastal cutthroat trout per monitoring station, which were approximately 30 meters long. The fish are caught predominately by children. The creek runs below ground at Alliance Avenue. Its flow rate is low approximately 2 cubic feet per second (cfs) during the summer. Because the creek is adjacent to the logging ponds, sampling has indicated a fair amount of tannin and lignins in the water, which restricts fish growth and reproduction. The agency will be conducting a fish count during this summer. There was a report of an ammonia release from another facility, Forest Cascade, in 1987. He did not know of any problems with Louisiana-Pacific. Perhaps, Ron Warren, at the same office would know.

hb/lp/clcr

CONTACT REPORT

AGENCY/AFFILIATION: California Department of Water Resources (DWR)		
DEPARTMENT: Northern District		
ADDRESS/CITY: P.O. Box 607, Red Bluff		
COUNTY/STATE/ZIP: Tehama, California 96080		
CONTACT(S)	**TITLE**	**PHONE**
1. Ralph Scott		916-525-6530
2.		
E & E PERSON MAKING CONTACT: Helena Brykarz		**DATE:** 6/25/90
SUBJECT: Nearest well		
SITE NAME: Louisiana-Pacific Corp.		**EPA ID#:** CAD980673578

Mr. Scott is no longer working in this area and will have somebody call me back with the location of the nearest well.

In the Arcata area, the drinking water is mainly from the Mad River wells. In the flats, groundwater is used predominately for irrigation. The Ranney wells are deep lateral shafts that pass through a thick layer of gravel in the Mad River area to a buried channel. Franciscan Bedrock stretches across this area.

hb/lp/clcr

CONTACT REPORT

AGENCY/AFFILIATION: California Department of Water Resources		
DEPARTMENT: Northern District		
ADDRESS/CITY: P.O. Box 607, Red Bluff		
COUNTY/STATE/ZIP: Tehama, California 96080		
CONTACT(S)	**TITLE**	**PHONE**
1. Glen Pierson	Environmental Geologist	916-525-6530
2.		
E & E PERSON MAKING CONTACT: Helena Brykarz		**DATE:** 6/25/90
SUBJECT: Nearby wells		
SITE NAME: Louisiana-Pacific Corp.		**EPA ID#:** CAD980673578

He will send printouts of wells of the area, as well as water levels. Most of the wells in this area are less than 100 feet below ground surface (bgs). There are no alternative sources of water other than the wells that are currently available. The soil is permeable and consists predominately of gravel and clay.

hb/lp/clcr

CONTACT REPORT

AGENCY/AFFILIATION: Humboldt Bay Municipal Water District		
DEPARTMENT: Pumping Station		
ADDRESS/CITY: P.O. Box 95, Eureka		
COUNTY/STATE/ZIP: Humboldt, California 95501		
CONTACT(S)	**TITLE**	**PHONE**
1. Harold Shamp		707-822-2918
2.		
E & E PERSON MAKING CONTACT: Helena Brykarz		**DATE:** 6/25/90
SUBJECT: Location of Ranney wells		
SITE NAME: Louisiana-Pacific Corp.		**EPA ID#:** CAD980673578

The Ranney well closest to Arcata is 200 yards upstream of the USGS gaging station on Highway 299 bridge. The other 3 wells are are located upstream, approximately 0.5 miles along the river. The last well #5, which is no longer operating, is at the junction of Lindsay Creek and Mad River.

The wells pump water into a reservoir, where the water is chlorinated before serving the city.

hb/lp/clcr

SITE/INCIDENT FORM 1 (SI1)
07/09/91

U.S. E.P.A. SUPERFUND PROGRAM
CERCLIS SITE INFORMATION FORM (SIF)

ENFORCEMENT SENSITIVE INFORMATION
FOR INTERNAL USE ONLY

*SITE NAME: LOUISIANA PACIFIC CORP ARCATA
*EPA ID NO: CAD980673578 FMS SITE/SPILL ID: 09

S/I RPM-OSC NAME/PHONE: _____/(___)___-____
OTHER REG CONTACT NAME/PHONE: _____/(___)___-____

ALIAS NAME(S): _____, _____
_____, _____
_____, _____

*STREET: HWY 299
*CITY: ARCATA
*COUNTY: HUMBOLDT
*STATE: CA
*ZIP: 95521

*LATITUDE: 40/54/20.0
*LONGITUDE: 124/03/40.0
*LL SOURCE: R
*LL ACCURACY: _

CONGRESSIONAL DISTRICT: 02
*COUNTY CODE: 023
*SMSA: ____
USGS HYDRO UNIT: 18010102
FED AGENCY PRP FLG: N
STATE PRP FLAG: N
PRP AGENCY CODE: ____, ____, ____, ____, ____, ____.
SECTION CODE : _____

*FED. FACILITY FLAG: N
*RCRA FACILITY FLAG: _
FED FACILITY DOCKET FLAG: F
DIOXIN TIER: _____
SITE NAME SOURCE: R
MUNICIPAL PRP FLAG: N
COST RECOVERY IND: E

AGGREGATE CASE BUDGET OBLIGATIONS:
AGGREGATE FUND OBLIGATIONS: TBD

*SITE/INCIDENT ABSTRACT: _____
_____
_____
_____

*SITE CLASSIFICATION: ND

(NG) FUND LEAD/NEGOT
(FE) FEDERAL ENFORCEMENT
(F) FUND LEAD/NO NEGOT
(ND) NO DETERMINATION(DEFAULT)
(SE) STATE ENFORCEMENT

*CORE DATA ELEMENT OR CODE
@ USACE OWNED SUBEVENT

ANY QUESTIONS? CALL CSC CERCLIS STAFF

ACTION:_____(CSC ONLY)

SITE/INCIDENT FORM 2 (SI2)
07/09/91

U.S. E.P.A. SUPERFUND PROGRAM
CERCLIS SITE INFORMATION FORM (SIF)

ENFORCEMENT SENSITIVE INFORMATION
FOR INTERNAL USE ONLY

*SITE NAME: LOUISIANA PACIFIC CORP ARCATA
*EPA ID NO: CAD980673578 FMS SITE/SPILL ID: 09

S/I RPM-OSC NAME/PHONE: _____/(___)___-____
OTHER REG CONTACT NAME/PHONE: _____/(___)___-____

*ENTRY NPL/STATUS INDICATOR: N

*PROPOSED NPL UPDATE NO: __

*FINAL NPL UPDATE NO: __

(S) PRE-PROPOSAL TO NPL
(P) SITE CURRENTLY PROPOSED FOR THE NPL
(R) SITE REMOVED FROM THE PROPOSED NPL
(F) SITE CURRENTLY ON THE NPL
(D) SITE DELETED FROM NPL
(N) SITE IS NOT CURRENTLY NOR WAS FORMERLY ON THE PROPOSED OR FINAL NPL
(O) NON SITE: A SITE/INCIDENT WHICH WILL NOT COUNT IN THE INVENTORY OR IN STATISTICAL REPORTS

*SITE CATEGORY: _

(A) ABANDONED
(B) CHEM. PLANT/IND REF
(C) CITY CONTAMINATION
(D) DIOXIN
(F) FEDERAL FACILITY
(G) GROUND WATER
(H) HOUSING AREA/FARM
(I) IND. WASTE TREATMENT
(J) INORGANIC WASTE
(L) LANDFILL
(M) MANUFACTURING PLANT
(N) MILITARY RELATED
(O) OTHER
(P) PURE LAGOONS
(R) RADIOACTIVE SITE
(T) MINES/TAILING
(V) WATERWAYS/CREEKS/RIVERS
(W) WELLS

*OWNERSHIP INDICATOR: UN

(PR) PRIVATELY OWNED
(CO) COUNTY OWNED
(IL) INDIAN LANDS
(FF) FED. OWNED
(DI) DISTRICT OWNED
(MX) MIXED OWNERSHIP
(ST) STATE OWNED
(MN) MUNICIPALITY OWNED
(OH) OTHER
(UN) UNKNOWN

*INCIDENT TYPE: (FOR REMOVAL OSC'S ONLY) _

(O) OIL SPILL OCCURING AT A LOCATION NOT PREVIOUSLY IDENTIFIED AS A CERCLIS SITE
(N) SPILL (OTHER THAN OIL) OR OTHER REMOVAL AT A LOCATION NOT PREVIOUSLY IDENTIFIED AS A CERCLIS SITE

*CORE DATA ELEMENT OR CODE
@ USACE OWNED SUBEVENT

ANY QUESTIONS? CALL CSC CERCLIS STAFF

ACTION:_____(CSC ONLY)

SITE/INCIDENT COMMENTS (SIC)
07/09/91

U.S. E.P.A. SUPERFUND PROGRAM
CERCLIS SITE INFORMATION FORM (SIF)

ENFORCEMENT SENSITIVE INFORMATION
FOR INTERNAL USE ONLY

*SITE NAME: LOUISIANA PACIFIC CORP ARCATA
*EPA ID NO: CAD980673578 FMS SITE/SPILL ID: 09

S/I RPM-OSC NAME/PHONE: _____/(___)___-____
OTHER REG CONTACT NAME/PHONE: _____/(___)___-____

CSC USE	COMMENT TYPE	GROUP NUMBER	LINE NUMBER	*COMMENT
--------		001	01	PENDING: REFERRAL TO TSCA 84/05/08.
--------	—	—	—	_____
--------	—	—	—	_____
--------	—	—	—	_____
--------	—	—	—	_____

*CORE DATA ELEMENT OR CODE
@ USACE OWNED SUBEVENT

ANY QUESTIONS? CALL CSC CERCLIS STAFF

ACTION:_____(CSC ONLY)

REGIONAL UTILITIES (RUT)
07/09/91

U.S. E.P.A. SUPERFUND PROGRAM
CERCLIS SITE INFORMATION FORM (SIF)

ENFORCEMENT SENSITIVE INFORMATION
FOR INTERNAL USE ONLY

*SITE NAME: LOUISIANA PACIFIC CORP ARCATA
*EPA ID NO: CAD980673578 FMS SITE/SPILL ID: 09

S/I RPM-OSC NAME/PHONE: _____/(___)___-____
OTHER REG CONTACT NAME/PHONE: _____/(___)___-____

CSC USE	REGIONAL UTILITY CODE	DESCRIPTION	DATE 1 MM/DD/YY	DATE 2 MM/DD/YY	DATE 3 MM/DD/YY	FREE FIELD
---	HSCP01	PCB'S	/ /	/ /	/ /	
---	9ERR01	ERRIS SITE	/ /	/ /	/ /	
---	9INT01	TSCA INSP	03/12/85	/ /	/ /	
---	9REF01	REFERRAL TO TSCA	05/08/84	/ /	/ /	

---						

*CORE DATA ELEMENT OR CODE
@ USACE OWNED SUBEVENT

ANY QUESTIONS? CALL CSC CERCLIS STAFF

ACTION:_____(CSC ONLY)

OPERABLE UNITS (OPU)
07/09/91

U.S. E.P.A. SUPERFUND PROGRAM
CERCLIS SITE INFORMATION FORM (SIF)

ENFORCEMENT SENSITIVE INFORMATION
FOR INTERNAL USE ONLY

*SITE NAME: LOUISIANA PACIFIC CORP ARCATA
*EPA ID NO: CAD980673578 FMS SITE/SPILL ID: 09

S/I RPM-OSC NAME/PHONE: _____/(___)___-____
OTHER REG CONTACT NAME/PHONE: _____/(___)___-____

*OPERABLE UNIT IND: 00 *OPERABLE UNIT NAME: SITE EVAL/DISP

*OPERABLE UNIT DESCRIPTION: _____

*OPERABLE UNIT IND: ___ *OPERABLE UNIT NAME: _____

*OPERABLE UNIT DESCRIPTION: _____

*OPERABLE UNIT IND: ___ *OPERABLE UNIT NAME: _____

*OPERABLE UNIT DESCRIPTION: _____

NOTE: *FOR PREREMEDIAL AND REMOVAL EVENTS, OPERABLE UNIT INDICATOR = 00.
*FOR REMEDIAL EVENTS, ASSIGN OPERABLE UNIT INDIICATORS BEGINNING WITH 01.
*AN "ALIAS LINK" LINKS AN OPERABLE UNIT WITH A SPECIFIC ALIAS

*CORE DATA ELEMENT OR CODE
@ USACE OWNED SUBEVENT

ANY QUESTIONS? CALL CSC CERCLIS STAFF

ACTION:_____(CSC ONLY)

PREREMEDIAL
INFORMATION (EVT/SVT/FIN)
07/09/91

U.S. E.P.A. SUPERFUND PROGRAM
CERCLIS SITE INFORMATION FORM (SIF)

ENFORCEMENT SENSITIVE INFORMATION
FOR INTERNAL USE ONLY

*SITE NAME: LOUISIANA PACIFIC CORP ARCATA
*EPA ID NO: CAD980673578 FMS SITE/SPILL ID: 09

S/I RPM-OSC NAME/PHONE: _____/(___)___-____
EVENT REGIONAL CONTACT NAME/PHONE: _____/(___)___-____
OTHER REG CONTACT NAME/PHONE: _____/(___)___-____

*OP UNIT *EVENT SUBEVENT	TYPE	*OP UNIT NAME *EVENT NAME *SUBEVENT NAME	LEAD	START PLAN (MM/DD/YY)	START *PLAN (FY/Q)	START *ACTUAL (MM/DD/YY)	COMPLETE PLAN (MM/DD/YY)	COMPLETE *PLAN (FY/Q)	COMPLETE *ACTUAL (MM/DD/YY)	PLANNING STATUS	SCAP NOTE
00		SITE EVAL/DISP									
DS1	DISCVRY	1	F	__/__/__	__/_	__/__/__	__/__/__	__/_	03/01/82	-	
*EVENT QUALIFIER: _											
PA1	PA	01	F	__/__/__	__/_	__/__/__	__/__/__	__/_	05/01/84	-	
*EVENT QUALIFIER: L											
PA2	PA	2	F	__/__/__	__/_	__/__/__	__/__/__	__/_	09/12/90	-	
*EVENT QUALIFIER: H											
SI1	SI	01	F	__/__/__	__/_	__/__/__	__/__/__	__/_	06/27/91	-	
*EVENT QUALIFIER: N											

11

1839-00003

```
REGION:  09                         U. S.  ENVIRONMENTAL  PROTECTION  AGENCY                              PAGE:    297
                                  OFFICE  OF  EMERGENCY  AND  REMEDIAL  RESPONSE                     RUN DATE: 84/09/13
                                         DATA  BASE  UPDATED  84/09/13                               RUN TIME: 17:18:55
                                      T.1 - ERRIS  TURNAROUND  DOCUMENT

                                   EPA ID NO.:  CAD980673578     SHEET  04

  SITE NAME:   LOUISIANA PACIFIC CORP ARCATA

REGIONAL ENTRIES
****************
                                           DESCRIPTION--------------------------------------------------------------------------------
    (ACTION - FOR          ENTRY          ------------------------------------------  DATE1        DATE2        DATE3       FREE FIELD
 DATA ENTRY USE ONLY)      CODE                                                     (YY/MM/DD)   (YY/MM/DD)   (YY/MM/DD)
 --------------------   -----------     -----------------------------------------------------------------------------------------------

        *__*              HSCP.01        PCB'S
                                                                                  *__/__/__* *__/__/__* *__/__/__* *__________*

        *__*              9CA1.01        NORTH
                                                                                  *__/__/__* *__/__/__* *__/__/__* *__________*

        *__*              9ERR.01        ERRIS SITE
                                                                                  *__/__/__* *__/__/__* *__/__/__* *__________*

        *__*              9INT.01        TSCA INSP
                                                                                   85/ 03/ 12 *__/__/__* *__/__/__* *__________*

        *__*              9REF.01        REFERRAL TO TSCA
                                                                                   84/ 05/ 08 *__/__/__* *__/__/__* *__________*

        *__*            *_____.___*     *______________________________________________________________________________*
                                        *________________________________________* *__/__/__* *__/__/__* *__/__/__* *__________*

        *__*            *_____.___*     *______________________________________________________________________________*
                                        *________________________________________* *__/__/__* *__/__/__* *__/__/__* *__________*

        *__*            *_____.___*     *______________________________________________________________________________*
                                        *________________________________________* *__/__/__* *__/__/__* *__/__/__* *__________*

        *__*            *_____.___*     *______________________________________________________________________________*
                                        *________________________________________* *__/__/__* *__/__/__* *__/__/__* *__________*

        *__*            *_____.___*     *______________________________________________________________________________*
                                        *________________________________________* *__/__/__* *__/__/__* *__/__/__* *__________*

        *__*            *_____.___*     *______________________________________________________________________________*
                                        *________________________________________* *__/__/__* *__/__/__* *__/__/__* *__________*

        *__*            *_____.___*     *______________________________________________________________________________*
                                        *________________________________________* *__/__/__* *__/__/__* *__/__/__* *__________*

        *__*            *_____.___*     *______________________________________________________________________________*
                                        *________________________________________* *__/__/__* *__/__/__* *__/__/__* *__________*

        *__*            *_____.___*     *______________________________________________________________________________*
                                        *________________________________________* *__/__/__* *__/__/__* *__/__/__* *__________*
```

SITE DATA

EPA ID NO.: CAD980673578 SHEET 01

(ACTION : *__* - FOR DATA ENTRY USE ONLY)

SF ID: *___* *___* *___* *___* *___*

SITE NAME: LOUISIANA PACIFIC CORP ARCATA

STREET: HWY 299

CITY: ARCATA

CNTY NAME: HUMBOLDT

LATITUDE: 40/54/20.0

LONGITUDE: 124/03/40.0

NATL PRIORITY: N

HRS: *____.__*

HRS DATE (YY/MM): *___/___*

RESPONSE TERMINATION (CHECK ONE IF APPLICABLE): PENDING X NO FURTHER ACTION *__*

ENF. DISP. (CHECK ANY THAT APPLY): NO VIABLE RESP. PARTY *__* VOL. RESP. *__* ENF. RESP. *__* COST RECOV. *__*

RSPO NAME: *_____* RSPO PHONE: *____-____-_____*

FED. FAC. (Y/N): N NON-SITE: *__*

SMSA: *_____* USGS HYDRO. UNIT: 18010102 REG. FLD1: *_____* REG. FLD2: V

SITE DESCRIPTION: *_____*
_____
_____
_____

SOURCE: R

CONG. DIST: 02

ST: CA ZIP: 95521-_____

CNTY CODE: 023

SOURCE COUNTS:

NOTIS:	0
STS:	0
HWDMS:	0
COMPOSITE:	0
OTHER:	0

EVENTS

	(ACTION - FOR DATA ENTRY USE ONLY)		EVENT TYPE	DATE (YY/MM) STARTED	DATE (YY/MM) COMPLETED	CONDUCTED BY EPA	STATE	RESP/PARTY	OTHER	COUNTS
RESPONSE EVENTS	*__*	(X)	SITE DISCOVERY (SD)		82/03					
	__	(X)	PRELIMINARY ASSESSMENT (PA)	*___/___*	84/05	*__*	*__*			
	__	(X)	SITE INVESTIGATION (SI)	84/05	*___/___*	X	*__*			
	__		REMEDIAL ACTION (RD)	*___/___*	*___/___*	*__*	*__*	*__*	*__*	*___*
	__		REMOVAL ACTION (RV)	*___/___*	*___/___*	*__*	*__*	*__*	*__*	*___*
ENFORCE. EVENTS	*__*		ENFORCEMENT INVESTIGATION (EI)	*___/___*	*___/___*	*__*	*__*		*__*	
	__		ADMINISTRATIVE ORDER (AO)	*___/___*	*___/___*	*__*	*__*		*__*	
	__		JUDICIAL ACTION (JA)	*___/___*	*___/___*	*__*	*__*		*__*	

SITE NAME: LOUISIANA PACIFIC CORP ARCATA

ALIAS AND ALIAS LOCATION DATA
****

ALIAS (ACTION *__* - FOR DATA ENTRY USE ONLY)

SEQ. NO.: *___* ALIAS NAME: *_____* SOURCE: *__*

ALIAS LOCATION (ACTION *__* - FOR DATA ENTRY USE ONLY)

CONTIGUOUS PORTION OF SITE: *__*

STREET: *_____* CONG. DIST.: *___*

CITY: *_____* ST: *___* ZIP: *_____-_____*

CNTY NAME: *_____* CNTY CODE: *____*

LAT: *___/___/___.__* LONG.: *____/___/___.__* SMSA: *_____* USGS HYDRO. UNIT: *_____*

ALIAS (ACTION *__* - FOR DATA ENTRY USE ONLY)

SEQ. NO.: *___* ALIAS NAME: *_____* SOURCE: *__*

ALIAS LOCATION (ACTION *__* - FOR DATA ENTRY USE ONLY)

CONTIGUOUS PORTION OF SITE: *__*

STREET: *_____* CONG. DIST.: *___*

CITY: *_____* ST: *___* ZIP: *_____-_____*

CNTY NAME: *_____* CNTY CODE: *____*

LAT: *___/___/___.__* LONG.: *____/___/___.__* SMSA: *_____* USGS HYDRO. UNIT: *_____*

SITE NAME: LOUISIANA PACIFIC CORP ARCATA

SITE COMMENTS
****

(ACTION - FOR DATA ENTRY USE ONLY)	COMMENT NUMBER	COMMENT
__	001	PENDING: REFERRAL TO TSCA 84/05/08.
__	*___*	*
__	*___*	*
__	*___*	*
__	*___*	*
__	*___*	*
__	*___*	*
__	*___*	*
__	*___*	*
__	*___*	*
__	*___*	*
__	*___*	*
__	*___*	*
__	*___*	*
__	*___*	*
__	*___*	*
__	*___*	*
__	*___*	*
__	*___*	*
__	*___*	*
__	*___*	*
__	*___*	*
* *	* *	*

***** CONFIDENTIAL *****
***** PREDECISIONAL DOCUMENT *****

SUMMARY SCORESHEET FOR COMPUTING PROJECTED PROPOSED REVISED HRS SCORE GW PA 2

SITE NAME: Louisiana Pacific

CITY, COUNTY: Arcata, Humboldt Co

EPA ID #: CAD980673578 **Lat/Long:** 40°53'51" / 124°04'2

PROGRAM ACCOUNT #: FCA0333PAA **T/R/S:** 6N/1E/16

EVALUATOR: Helena Brykarz **DATE:** 6/15/90

THIS SCORESHEET IS FOR A: PA 2 **SSI** ____ **LSI** ____

SIRe ____ **PA Redo** ✓ **Other (Specify)** ____

RCRA STATUS (check all that apply):

___ Generator ___ Small Quantity Generator ___ Transporter ___ TSDF

✓ Not Listed in RCRA Database as of (date of printout) 5/8/90

STATE SUPERFUND STATUS:

N/A BEP (date) / / N/A WQARF (date) / /

	S pathway	S^2 pathway	
Air Migration Pathway Score (S_a)	29.11	847.39	
Groundwater Migration Pathway Score (S_{gw})	59.61	3553.35	
Surface Water Migration Pathway Score (S_{sw})	13.49	181.98	
On-site Exposure Pathway Score (S_{os})	46.2 or 0	2134.44	
$S^2_a + S^2_{gw} + S^2_{sw} + S^2_{os}$		6717.16	(4,582.9
$(S^2_a + S^2_{gw} + S^2_{sw} + S^2_{os})/4$		1679.29	(1,145.7
$\sqrt{(S^2_a + S^2_{gw} + S^2_{sw} + S^2_{os})/4}$		40.98	(33.8

*Pathways not evaluated (explain): ____

If one considered current conditions - on site could be zero because the waste material was removed - The site would still score.

rhrs/june90

AIR MIGRATION PATHWAY SCORESHEET

HED ↓

Factor Categories and Factors

	Likelihood of Release	Maximum Value	Projected Score	Rationale	Data Qual.
1.	Observed Release	450	450	1	H
*2.	Potential to Release (Highest value assigned to any source evaluated)	390			
3.	Likelihood of Release (Higher of Lines 1 or 2)	450	450		
	Waste Characteristics				
4.	Toxicity/Mobility 2-12, p 48	100	80	2	H
5.	Hazardous Waste Quantity	100	64	3	E
6.	Waste Characteristics (Lines 4+5)	200	144		
	Targets 2-15, p 58 nearest occupied bldg				
7.	Maximally Exposed Individual	50	50	4	H
*8.	Population	235	9	5	E
*9.	Land Use	10	10	4	H
*10.	Sensitive Environments	100	26	7	H
11.	Targets (Lines 7+8+9+10, subject to a maximum of 235)	235	95		
	Air Pathway Migration Score				
12.	Pathway Score (S_a) (Lines 3x6x11)/2.115X10^5	100	29.11 **		

*Use additional tables.
**S_a is not to be rounded to the nearest integer.

AIR PATHWAY CALCULATIONS

2. Potential to Release

gas - vapor
particulate - p36
p38 (2-9)

use h
for #

Source Type p31	Source Type Factor Value (Table 2-6) p31 (A) D=80	Source Mobility Factor Value (Table 2-10) p39 (B) D=50	Sum (A + B)	Source Contain. Value (Tables 2-4,2-5) p26 - 30 (C) D=3	Emissi Sourc Value (A+B)
1.					
2.					
3.					
4.					

8. Population

include workers, students

Distance Category	Distance (miles)	(A) Population	(B) Distance Weight	(A x B)
1	on-site	93	5.265	489
2	>0 to 0.25	0	1.0	0
3	>0.25 to 0.5	739	0.1751	129
4	>0.5 to 1	1633	0.0517	84.43
5	>1 to 2	8,655	0.0171	148
6	>2 to 3	4,241	0.0083	35.2
7	>3 to 4	8,106	0.0054	43.77
		23,467		

Air target populations = $\frac{\text{(Sum of AxB)}}{100}$ = 9.294 Sum of (A x B) 929.4

AIR PATHWAY CALCULATIONS (Cont.)

9. Land Use

Land Use	Distance (miles)	(A) Distance Weight (Table 2-16)	(B) Value For Use Type	(A x B)
Commercial/Industrial/ Institutional	0.25	1	5	5
Single Family Residential	0.25	1	8	8
Multiple Family Residential	0.25	1	10	10
Parks			5	
Prime Agricultural			7	
Nonprime Agricultural			5	
			Sum of (A x B)	23

Land use factor value = Sum of (A X B) Subject to maximum value of 10 = 10

10. Sensitive Environments

for each species separate habitats — use highest value

Type of Environment	(A) Assigned Value (Table 2-18) p63-66 2-19	Distance (miles)	(B) Distance Weight (Table 2-16)	(A x B) / 10
Humboldt Bay gumplant (FC)	75	3 mi south	0.0083	0.6225
northern coastal salt marsh (S2)	50	3 mi. south	0.0083	0.415
tidewater goby (FC)	75 (2)	3 mi. southwest	0.0083	0.6225 / 0.6225
spotted owl (FT)	100	location info suppressed ≈ 0.25	1	100
western lily (FC)	75 (2)	3 mi south	0.0083	0.6225 / 0.6225
Humboldt Bay Owl's-Clover (FC)	75 (2) (1)	3 mi south 4 mi	0.0083 0.0054	0.6225 0.6225 0.405

Sensitive environment factor value = Sum of (A x B) =

Pt. Reyes Bird's Beak (FC)	75 1 1	2 mi southwest 3	10 0.0171 0.0083	1.2825 0.6225
Double Crested Cormorant (S2)	50	4 mi. south	max=100 0.0054	0.27
Humboldt Bay National Wildlife Refuge	75	3 mi south	0.0083	0.6225
James Creek (Coastal cutthroat trout)	75	0.25 mi south	1	75 1 2
rhrs/june90 Spawning migratory	75	0.25 mi s	1	75 1 2
			÷10 = 25.9	257.9

GROUNDWATER MIGRATION PATHWAY SCORESHEET

Factor Categories and Factors

	Likelihood of Release	Maximum Value	Projected Score	Rationale	Data Qual.
1.	Observed Release	500	0	8	H
*2.	Potential to Release p 218-229				
	2a. Containment choose highest	10	10	9	H
	2b. Net Precipitation 3-3, p82	10	6	10	H
	2c. Depth to Aquifer/ Hydraulic Conductivity*	35	35	11	H
	2d. Sorptive Capacity*	5	5	11	H
	2e. Potential to Release (Lines 2a x (2b+2c+2d))	500	460		
3.	Likelihood of Release (Higher of Lines 1 or 2e)	500	460		
	Waste Characteristics 3-10, p 97				
4.	Toxicity/Mobility	100	80	12	H
5.	Hazardous Waste Quantity	100	64	13	E
6.	Waste Characteristics (Lines 4+5)	200	144		
	Targets nearest drinking water well 3-11, p100				
7.	Maximally Exposed Individual	50	22	13	H
*8.	Population				
	8a. Level I Concentrations (only w/ contaminated wells)	200			
	8b. Level II Concentrations	200			
	8c. Level III Concentrations*	200			
	8d. Potential Contamination	200	108	14	E
	8e. Population (Lines 8a+ 8b+8c+8d, subject to a maximum of 200)	200	108		
9.	Groundwater Use				
	9a. Drinking Water Use 3-15, p110	50	50	15	H
	9b. Other Water Use 3-16, p112	20	20	14	H
	9c. Groundwater Use (Lines 9a+9b, with a maximum of 50)	50	50		
10.	Wellhead Protection Area	50	N/A		
11.	Targets (Lines 7+8e+9c+10, subject to a maximum of 200)	200	180		

Aquifer Evaluated _____

GROUNDWATER MIGRATION PATHWAY SCORESHEET (CONCLUDED)

Factor Categories and Factors

Likelihood of Release	Maximum Value	Projected Score	Rationale	Data Qual.
12. Aquifer Score [Lines 3x6x11)/$2x10^5$]**	100	59.61		

Groundwater Migration Pathway Score

13. Pathway Score (Sgw), (Highest Value from Line 12 for all aquifers evaluated)	100	59.61 **	

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* Use additional tables

** These scores are not to be rounded to the nearest integer.

Aquifer Evaluated _____

GROUNDWATER PATHWAY CALCULATIONS

2. Potential to Release

① 3-5, p87 ② 3-4, p84 ① 3-6, p90 ② plug into equation ↓ ③ 3-7, p91

Layer Description (i.e., description of layers between contamination and aquifer)	(T) Thickness (ft)	(HC) Hydraulic Conductivity (cm/sec) (see Table 3-5) D=.35	(SC) Average Sorbent Content Value From Table 3-6 D=5	(T/HC)	(TxSC)
gravel / clay	12	1×10^{-4}	15	1200	180
Sum(T)	12			Sum(T/HC)=	Sum(TxSC)

Thickness-Weighted Hydraulic/Conductivity = $\frac{\text{Sum(T)}}{\text{Sum(T/HC)}}$ = 0.01

Depth to Aquifer/Hydraulic Conductivity (Table 3-4) (Line 2c) p84 = 35

Sorbent Content = $\frac{\text{Sum(T x SC)}}{100}$ = 1.8

Sorptive Capacity Factor (Table 3-7) = 5

8. Population

Actual Contamination of drinking water supply wells (3-12, 3-13 on p101, p104)

Well Identifier	Contaminant Detected	Concentration (Note Units)	Benchmark	(A) Population	(B) Level* Divisor	(A/B)
						135

* Divisors
- Level I = 1
- Level II = 10
- Level III = 100

Sum (A/B) Level I

Sum (A/B) Level II

Sum (A/B) Level III

Aquifer Evaluated

GROUNDWATER PATHWAY CALCULATIONS (Cont.)

8. **Population**

Potential Contamination

Dilution Weighting Factor (DW)

Do not include people in "actual contamination"

Distance (miles)	Karst	All Others	(P) Population	(DW x P)
0 to 1/4	1.00	1.00		
>1/4 to 1/2	0.62	0.62		
>1/2 to 1	0.50	0.32		
>1 to 2	0.50	0.18	4 Ranney Wells 60,000	10,800
>2 to 3	0.50	0.13		
>3 to 4	0.50	0.08		
			Sum (DW x P)	10,800

Potential contamination = $\frac{\text{Sum(DW x P)}}{100}$ = 108

Aquifer Evaluated _____

SURFACE WATER MIGRATION PATHWAY SCORESHEET

Factor Categories and Factors	Maximum Value	Projected Score	Rationale	Data Qual.
DRINKING WATER THREAT				
Likelihood of Release				
1. Observed Release	120	0	17	E
2. Potential to Release by Overland Flow				
2a. Containment p232-243	10	10	18	H
2b. Runoff **	6	6	19	H
2c. Distance to Surface Water 4-6, p141	6	6	20	H
2d. Potential to Release by Overland Flow (Lines (2a)x(2b+2c))	120	120		
3. Potential to Release by Flood				
3a. Containment (Flood) 4-7, p143	10	0	21	A
3b. Flood Frequency 4-8, p144	12	0	21	E
3c. Potential to Release by flood (Lines 3ax3b)	120	0		
4. Potential to Release (Lines 2d+3c, subject to a maximum of 120)	120			
5. Likelihood of Release (Higher of Lines 1 or 4)	120	120		
Waste Characteristics				
6. Toxicity/Persistence 4-10, p149	100	53	22	H
7. Hazardous Waste Quantity	100	64	3	E
8. Waste Characteristics (Lines 6+7)	200	117		
Targets				
9. Maximally Exposed Individual (50x DWF from 4-11, p153)	50	0	23	H
*10. Population				
10a. Level I Concentrations * (only w/ actual contamination)	200			
10b. Level II Concentrations *	200			
10c. Level III Concentrations *	200			
10d. Potential Contamination **	200			
10e. Population (Lines 10a + 10b+10c+10d, subject to a maximum of 200)	200			

** ① 2yr, 24-hr rainfall

② 4-2, p135-136 (infiltration/land use) =
4-4, p138 (Rainfall/Runoff) =

③ 4-4, 4-3 (p137) (Drainage Area) =
4-5, p139 (Runoff Factor Value) =

rhrs/june90

* 4-11, p1. mixing zone is 1st 3m downst from p of ent. assign

SURFACE WATER MIGRATION PATHWAY SCORESHEET (CONTINUED)

Factor Categories and Factors	Maximum Value	Projected Score	Rationale	Data Qual.
DRINKING WATER THREAT (CONCLUDED)				
Targets (Concluded)				
11. Surface Water 4-12, p159				
11a. Drinking Water Use	50	0		
11b. Other Water Use 4-13, p161	20	?		
either must be 0 → 11c. Surface Water Use (Lines 11a+11b)	50			
12. Targets (Lines 9+10e+11c, subject to a maximum of 200)	200	?		
Drinking Water Threat Score				
13. Drinking Water Threat (Lines 5x8x12)	4.8×10^6	0		
HUMAN FOOD CHAIN THREAT				
Likelihood of Release				
14. Likelihood of Release (Same Value as Line 5)	120	120		
Waste Characteristics (same as 6, except use chem w/ highest "bioaccumulation")				
15. Toxicity/Persistence	100	53	24	H
16. Hazardous Waste Quantity (same as 7)	100	64	3	
17. Waste Characteristics (Lines 15+16)	200	117		
Targets				
*18. Population				
18a. Potential Human Food Chain Contamination*	200	0.0216	25	E
18b. Actual Human Food* Chain Contamination	200	0		
18c. Population (Lines 18a+18b, subject to a maximum of 200)	200	0.0216		
0 or 0 → 19. Fishery Use 4-17, p172	50	30	26	H
20. Targets (Lines 18c+19, subject to a maximum of 200)	200	30		

SURFACE WATER MIGRATION PATHWAY SCORESHEET (CONTINUED)

Factor Categories and Factors	Maximum Value	Projected Score	Rationale	Data Qual.
HUMAN FOOD CHAIN THREAT (Concluded)				
Human Food Chain Threat Score				
21. Human Food Chain Threat (Lines 14x17x20)	4.8×10^6	421,200		
HUMAN RECREATION THREAT				
***NOT EVALUATED QUANTITATIVELY				

SURFACE WATER MIGRATION PATHWAY SCORESHEET (CONTINUED)

Factor Categories and Factors	Maximum Value	Projected Score	Rationale	Data Qual.
ENVIRONMENTAL THREAT				
29. Likelihood of Release (Same Value as Line 5)	120	120		
Waste Characteristics (4-24, p 191)				
30. Ecosystem Toxicity/Persistence	100	47	27	H
31. Hazardous Waste Quantity same as 7	100	64	3	L
32. Waste Characteristics (Lines 30+31)	200	111		
Targets				
*33. Sensitive Environments				
33a. Level I Concentrations*	120			
33b. Level II Concentrations*	120			
33c. Potential Contamination*	120	17	29	H
33d. Sensitive Environments subject to a maximum of 120)	120	17		
34. Targets (Value from Line 33)	120	17		
Environmental Threat Score				
35. Environmental Threat (Lines 29x32x34)	2.88×10^6	226,440		

SURFACE WATER MIGRATION PATHWAY SCORE FOR A WATERSHED

36. Watershed Score [(Lines 13+21+35)/48,000 subject to a maximum of 100]	100	13.49	**

SURFACE WATER MIGRATION PATHWAY SCORE

37. Pathway Score (Sgw), (Sum of scores from Line 36 for all watersheds evaluated, subject to a maximum of 100)	100		**

* Use additional tables.

** These scores are not to be rounded to the nearest integer.

SURFACE WATER PATHWAY CALCULATIONS

10. **Drinking Water Targets**

3-12, p101 + 3-13, p104

Actual Contamination — Levels I-II only with actual contamination at intake

Intake	Contaminant Detected	Concentration (Note Units)	Benchmark	(A) Population	(B) Level* Divisor	(A/

Sum (A/B) Level I (10a) ____

Sum (A/B) Level II (10b) ____

Sum (A/B) Level III (10c) ____

* Divisors
- Level I = 1
- Level II = 10
- Level III = 100

Potential Contamination

p153

Intake	Average Stream Flow	(DW) Dilution Factor (Table 4-11)	(P) Population Served	(DW x P

Sum (DW x P) (10d) ____

Potential contamination = $\frac{\text{Sum(DW x P)}}{100}$ = ____

SURFACE WATER CALCULATIONS (Cont.)

18. Food Chain Targets

Fishery	Production (lb/yr) (p244-253 (last resort) ↓)	Assigned Production Value (Table4-15)	Bioaccumulation Factor Value	(P) Assigned Population Value (Table4-16) p170	Average Stream Flow at Fishery (cfs)	(DW) Dilution Weighting Factor (Table4-11) p153 (cannot use "mixing zone")	(PxDW)
Humboldt Bay	840,000	(6)	+ (1)	→ 160	( ) →	0.001	0.16
James Creek	1000-10,000	4	1	2	2+ (let's say 5)	1	2

Sum (P) = 162 Sum (PxDW) = 2.16

For fisheries with Actual Contamination (when tissue samples show contamination), Food Chain Targets = Sum (P) = 2.16

For fisheries with Potential Contamination, Food Chain Targets = $\frac{\text{Sum(DW xP)}}{100}$ = 0.0

SURFACE WATER CALCULATIONS (Cont.)

33. **Environmental Targets** 4-25, p193, 3-13, p104

Actual Contamination – of aquatic sensitive environments

Sensitive Environment	(A) Assigned Value (Table 2-18 p63 or 2-19) p64	(B) Level Multiplier*	(A x B)
		Sum (A x B) Level I	
		Sum (A x B) Level II	

* Multipliers
- Level I = 10
- Level II = 1

Potential Contamination

attached Suitable

Sensitive Environment	p63-66 (A) Assigned Value (Table 2-18 or 2-19)	Average Stream Flow (cfs)	p153 "mixing zone cannot be used" (DW) Dilution Weighting Factor (Table 4-11)	(A x DW)
			Sum of (A x DW)	

Potential contamination = $\frac{\text{Sum (A x DW)}}{10}$ = _____

ON-SITE EXPOSURE PATHWAY SCORESHEET

Factor Categories and Factors

	Maximum Value	Projected Score	Rationale	Data Qual.
Resident Population Threat				
1. Likelihood of Exposure	100			
2. Waste Characteristics	5			
3. Targets				
3a. High-Risk Population	100			
3b. Total Resident Population	100			
3c. Terrestrial Sensitive Environments	25			
3d. Targets (Lines 3a+3b+3c, subject to a maximum of 100)	100			
4. Resident Population Threat Score (Lines 1x2x3d)	50,000	0	29	E
Nearby Population Threat				
5. Likelihood of Exposure				
5a. Waste Quantity	100	100		
5b. Accessibility Frequency of Use	100	75		
5c. Likelihood of Exposure	100	100		
6. Waste Characteristics	5	3		
*7. Targets				
7a. Population Within 1-Mile*	100	77		
7b. Targets (Line 7a, subject to a maximum of 100)	100	77		
8. Nearby Population Threat Score (Lines 5cx6x7b)	50,000	23,100		
On-site Exposure Pathway Score				
9. On-site Exposure Pathway Score (Sos) (Lines [4+8]/500, to a maximum of 100)	100	46.2**		

* Use additional table.

**These scores are not to be rounded to the nearest integer.

ON-SITE EXPOSURE CALCULATIONS

7. Nearby Population Targets

Same as air

Travelled Distance (miles)	(A) Multiplier	(P) Population	(A x P)
0 to 1/4	0.10	0	0
>1/4 to 1/2	0.05	739	36.59
>1/2 to 1	0.025	1633	40.83
		Sum (A x P)	77.42

HRS ADDENDUM 2.

TOXICITY/PERSISTANCE ADDENDUM

CHEMICAL	OVERALL TOXICITY	Fresh/Salt ECOSYSTEM TOXICITY	GAS MOBILITY (AIR VAULE)	AQUATIC MOBILITY (GROUNDWATER VALUE)	RIVER PERSISTANCE (SUFACE WATER VALUE)	~~BIOACCUMULATION (HUMAN FOOD CHAIN POPULATION VALUE USING 6 AS A PRODUCTION VALUE)~~
phenol	3	3/3 (47)*	2 (63)	3 (80)*	1 (47)	1
ammonia	2	1/1 (43)	3 (70)*	3 (70)	2 (53)*	1
PCB	5	5/5 (100)	3 (100)	0 (50)	3 (100)*	6

formaldehyde — not in versa's tables

rHRS Addendum 1

SENSITIVE ENVIRONMENTS ALONG THE SURFACE WATER PATHWAY

Sensitive Environment/Species	Number of Locations X Distance Weighting Factor X Sensitive Environment Factor Value	Value
Janes Creek spawning habitat	1 x 1 x 75	75
Janes Creek migratory habitat	1 x 1 x 75	75
Northern coastal salt marsh	1 x 0.001 x 50	0.05
Humboldt Bay National Wildlife Refuge	1 x 0.001 x 75	0.75
North sea grass bed	1 x 0.001 x 75	0.75
Great blue heron	1 x 0.001 x 50	0.05
Great egret	1 x 0.001 x 50	0.05
California clapper rail	1 x 0.001 x 100	0.1
Snowy plover	1 x 0.001 x 75	0.75
Bank swallow	1 x 0.001 x 50	0.05
Menzie's wallflower	4 x 0.001 x 75	3.0
Humboldt Bay owl's-clover	9 x 0.001 x 75	6.75
Point Reyes bird's-beak	9 x 0.001 x 75	6.75
Tidewater goby	2 x 0.001 x 75	1.5
Western lily	2 x 0.001 x 75	1.5
Humboldt Bay gumplant	2 x 0.001 x 75	1.5
		173.55/10 = 17.35

hb/lp/tbls

rHRS RATIONALE - LOUISIANA-PACIFIC CORPORATION

1. In 1988, the facility emitted 45 pounds per hour (pph) of particulate emissions thus exceeding state permissible levels. The North Coast Unified Air Quality Management District (AQMD) subsequently issued a violation to the facility. These particulate emissions from wood flake driers consist mainly of wood fines and various hydrocarbons (5). Additionally, there have been many complaints about air emissions (116).

2. Phenol and formaldehyde are used in the manufacture of particle boards and are available to the air pathway through the drier emissions (2). The overall toxicity value for phenol is 3 and the gas mobility value is 2. However, because there is an observed release, the mobility value becomes 3. Formaldehyde is not listed in the Versar tables. Given the scope of this project, there was not enough time to calculate the appropriate values for this chemical.

3. In 1990, 1,600 cubic yards of waste material was excavated from the pond (3). This material came from the particulate drier emissions, which accumulated on the ground surface, and later were carried to the pond by surface runoff. This amount is converted to 3,200,000 pounds, and is divided by 50,000 to give a quantity of 64. This is the waste quantity available to air, groundwater and surface water. While this is a historic condition, waste is continuously being generated.

4. There are 93 workers on site (16).

5. There are 93 employees at the facility (16). Using the GEMS data, there is a population of 23,467 within 4 miles of the site (23).

6. The facility is within an industrial area. There are residences approximately 0.25 miles to the north of the site (16).

7. See sensitive environments table. Janes Creek, which is 0.25 miles south of the site, is spawning and migratory habitat for coastal cutthroat trout (2). Candidates for the federal endangered species list include the Humboldt Bay gumplant, tidewater goby, western lily, Humboldt Bay owl's- clover, and the Point Reyes bird's- beak, all of which are located approximately 3 miles south of the site. Also, a northern coastal salt marsh, an ecosystem with 6 to 20 occurrences in the state, is located approximately 3 miles southwest of the site. The Humboldt Bay National Wildlife Refuge is approximately 3 miles south of the site. The double crested cormorant, which has 6 to 20 occurrences in the state, can be located 4 miles south of the site (20). Finally, the spotted owl, whose exact location was suppressed in the Natural Diversity Data Base, has habitat in the area. Because the species requires such a large habitat, it is reasonable to assume that it may be found as close as 0.25 miles from the site (NDDB). The northern spotted owl was recently listed as a threatened species by the federal government (21).

8. There are no known releases to groundwater (4).

hb/lpca/rat

9. Particulate emissions may have settled into Mad River and given that surrounding streams contain formaldehyde, they are probably from the facility (2).

10. The annual net precipitation in Eureka is 23.94 inches (11,12).

11. Irrigation water wells located within 1 mile of the site have a depth to groundwater of 12 to 18 feet bgs. The site is located on an alluvial plain, consisting of clay, sand, and gravel. Beds of coarse sand and gravel yield water readily to local wells. There is no confining layer in the area (10).

12. The overall toxicity for phenol is 3, and the groundwater mobility is 3. Phenol is available to groundwater through the drier emissions, which are deposited on the ground surface, in the pond and in nearby streams.

13. The nearest drinking water wells are 0.5 to 1 mile northeast of the site (13).

14. There are four Ranney wells which draw water for the Humboldt Municipal Water District from underneath the Mad River. The nearest well is approximately 1 mile northeast of the site. The other three functioning wells are located along the Mad River for another 0.5 miles upstream. These wells are not blended and serve approximately 60,000 people (14,15).

15. The only alternative to the wells would be the drilling of more wells (Glenn Pierson contact report).

16. Wells in Arcata Bottoms are used for irrigation (13).

17. In 1990, the pond overflow was sampled by RWQCB and 57 milligrams per liter (mg/L) of formaldehyde was detected. In another sampling effort in 1990, 3.0 mg/L of ammonia was detected in the pond overflow. However, an observed release was not declared by RWQCB because background streams have high levels of formaldehyde as well. No other local facility uses formaldehyde in its processes. The stream contamination could be a result of LP particulate emissions (4).

18. Particulate emissions are deposited onto the ground surface of the facility and are carried to the pond by runoff (2).

19. The 2-year, 24-hour rainfall is 3.5 inches (19). The infiltration rate appears to be high and the facility is in an industrial area. The drainage area is estimated to be 50 to 500 acres.

20. The distance to the surface water is less than 100 feet (1).

hb/lpca/rat

21. It is not known whether engineer-certified, flood containment exists. The facility is in an area that floods rarely. It is not even within a 500-year floodplain (18).

22. There is no evidence that PCBs exist on site or in the surface water. Therefore, ammonia with an overall toxicity value of 2 and a river persistence value of 2 is used.

23. No downstream water is used for drinking purposes (2).

24. Without considering PCBs, phenol has the highest bioaccumulation value of 3.

25. If an average salmon weighs approximately 12 pounds, then Humboldt Bay produces approximately 360,000 pounds of silver salmon, and 120,000 pounds of chinook salmon annually. According to a U.S. Geologic Study (USGS) topographic map, Janes Creek appears to be 1 kilometer in length before it submerges below ground surface at Alliance Avenue. There appears to be one coastal cutthroat trout for every meter in the creek. As a result, the downstream fishable length of the creek is estimated to be 1,000 meters. The average weight is not known, but is each fish probably between 1 and 10 pounds. The flow rate for Humboldt Bay is estimated to be similar to that of a major river. The flow rate for Janes Creek is 2 cubic feet per second (cfs) during the summer. It is assumed that the average annual rate would be higher - probably higher than 5 cfs (17).

26. Janes Creek is used for recreational fishing.

27. Phenol has an ecosystem toxicity value of 3, and river persistence value of 1. Phenol is used in the processes, and may be emitted to the air, settling into the streams (2).

28. See rHRS Addendum 1 (2,20,22).

29. According to FIT, it appears that there are no residents on site. However, contamination from air emissions may have reached neighboring residences. It is not known how large of an area may have been affected.

30. The pond is 20 acres or 871,200 sq. ft. which would give a value of 100.

31. The pond is accessible to the public (4).

32. Phenol has the highest overall toxicity of 3.

33. There are approximately 2,372 people within 1 mile (23).

hb/lpca/rat

***** CONFIDENTIAL *****
***** PRE-DECISIONAL DOCUMENT *****

SUMMARY SCORESHEET FOR COMPUTING
PROJECTED HRS SCORE

SITE NAME: Louisiana Pacific Corporation Lat/Long: 40° 53' 51"/124°04' 22"

CITY, COUNTY: Arcata, Humboldt County T/R/S: T6N/R1E/Section 16

EPA ID #: CAD980673578

PROGRAM ACCOUNT #: FCA0333SAA

EVALUATOR: Belinda J. Peters DATE: June 6, 1991

THIS SCORESHEET IS FOR AN: PA ___ SSI _X_ LSI ___

OTHER: _____

RCRA STATUS (Check all that apply):

_____ Generator _____ Small Quantity Generator _____ Transporter _____ TSDF

_X_ Not listed (date of printout): 5/3/90

STATE SUPERFUND STATUS:

_NA_ BEP (1/1/90) _NA_ WQARF (/ /) _X_ No State Superfund Status (1/1/91)

PROJECTED REVISED HRS SCORE	S pathway	S^2 pathway
Groundwater Migration Pathway Score (S_{gw})	42.36	1,794.37
Surface Water Migration Pathway Score (S_{sw})	0.92	0.84
Soil Exposure Pathway Score (S_s)	0*	0
Air Migration Pathway Score (S_a)	0*	0
$S^2_a + S^2_{gw} + S^2_{sw} + S^2_s$		1,795.21
$(S^2_a + S^2_{gw} + S^2_{sw} + S_s)/4$		448.80
$((S^2_a + S^2_{gw} + S^2_{sw} + S^2_s)/4)^{1/2}$		21.18

* Pathways not evaluated (explain): The soil exposure pathway was not evaluated as there is no documented soil contamination present at the site. The air migration pathway was not evaluated because waste material has been removed from the site, and the facility is currently in compliance with AQMD stack emission standards.

GROUNDWATER MIGRATION PATHWAY SCORESHEET

Factor Categories	Maximum Value	Projected Score	Rationale	Data Quality
Release				
1. Observed Release	550	0	1	E
2. Potential to Release*				
2a. Containment	10	10	2	E
2b. Net Precipitation	10	10	3	E
2c. Depth to Aquifer	5	5	4	E
2d. Travel Time	35	35	5	E
2e. Potential to Release (Lines 2a x (2b+2c+2d))	500	500		E
3. Likelihood of Release (Higher of Lines 1 or 2e)	550	500		E
Waste Characteristics				
4. Toxicity/Mobility	N/A	10	6	E
5. Hazardous Waste Quantity	N/A	100	7	E
6. Waste Characteristics (lines 4 x 5, then assign a value from Table 2-7)	100	6		E
Targets				
7. Nearest Well	50	9	8	E
8. Population*				
8a. Level I Concentrations	N/A	0	9	E
8b. Level II Concentrations	N/A	0	9	E
8c. Potential Contamination	N/A	1,151	10,see calc.	E
8d. Population (Lines 8a+8b+8c)	N/A	1,151		E
9. Resources	5	5	11	H
10. Wellhead Protection Area	20	0	12	E
11. Targets (Lines 7+8d+9+10)	N/A	1,165		E
12. Aquifer Score [(Lines 3 x 6 x 11) / 82,500]**	100	42.36		E
Groundwater Migration Pathway Score				
13. Pathway Score (Sgw), 100 (Highest Value from Line 12 for all aquifers evaluated)	100	42.36		E

* Use additional tables

** These scores are not to be rounded to the nearest integer.

GROUNDWATER

Substance	Toxicity	Mobility	Persistence	Bioaccumulation	Ecosystem Toxicity
Ammonia	10	1	0.4	0.5	1,000
Formaldehyde	10	1	0.4	0.5	10
Phenol	1	1	$7x10^{-4}$	5	10,000

GROUNDWATER PATHWAYCALCULATIONS

2. Potential to Release

Travel Time		
Soil Layer Description	(T) Thickness of Layer (ft)	(HC) Hydraulic Conductivity (cm/sec)
Soil	2	10^{-4}

Lowest (HC) = 10^{-4} Thickness of layers with Lowest (HC) = 2 feet

Travel Time Factor Value (Table 3-7) = 35

8. Population

Actual Contamination						
Well Identifier	Contaminant Detected	Concentration (note units)	Benchmark	(A) Apportioned Population Served	(B) Level Multipliers	(A x B)

Multipliers		
Level I = 10		Sum (A x B) Level I ___
Level II = 1		Sum (A x B) Level II ___

8. Population (continued)

Potential Contamination		
Distance (miles)	**(P) Population**	**Distance-Weighted Population Value (DWPV) (Table 3-12)**
>0 to 1/4	0	0
>1/4 to 1/2	0	0
>1/2 to 1	0	0
>1 to 2	48,000	9,385
>2 to 3	12,000	2,122
>3 to 4	0	0
		Sum (DWPV) = 11,507

Potential contamination = $\frac{\text{Sum (DWPV)}}{10}$ = 1,150.7 (1,151)

SURFACE WATER MIGRATION PATHWAY SCORESHEET
Overland/Flood Component

Drinking Water Threat

Factor Categories	Maximum Value	Projected Score	Rationale	Data Quality
Release				
1. Observed Release	550	550	13	E
2. Potential to Release by Overland Flow*				
2a. Containment	10	10	2	E
2b. Runoff	25	17	14	E
2c. Distance to Surface Water	25	25	15	H
2d. Potential to Release by Overland Flow (Lines 2a x (2b+2c))	500	420		E
3. Potential to Release by Flood				
3a. Containment (Flood)	10	10	16	E
3b. Flood Frequency	50	0	17	E
3c. Potential to Release by Flood (Lines 3a x 3b)	500	0		E
4. Potential to Release (Lines 2d + 3c, subject to a maximum of 500)	500	420		E
5. Likelihood of Release (Higher of Lines 1 or 4)	550	550		E
Waste Characteristics				
6. Toxicity/Persistence	N/A	4	18	E
7. Hazardous Waste Quantity	N/A	100	7	E
8. Waste Characteristics (lines 6 x 7, then assign a value from Table 2-7)	100	3		E
Targets				
9. Maximally Exposed Individual	50	0	19	H
10. Population*				
10a. Level I Concentrations	N/A	0	19	H
10b. Level II Concentrations	N/A	0	19	H
10c. Potential Contamination	N/A	0	19	H
10d. Population (Lines 10a+10b+10c)	N/A	0	19	H

SURFACE WATER MIGRATION PATHWAY SCORESHEET (CONTINUED)
Overland/Flood Component

Drinking Water Threat (Concluded)

Factor Categories	Maximum Value	Projected Score	Rationale	Data Quality
11. Resources	5	0	20	E
12. Targets (Lines 9+10d+11)*	N/A	0		E
Drinking Water Threat Score				
13. Drinking Water Threat [(Lines 5 x 8 x 12) / 82,500, subject to a maximum of 100)]	100	0		E
HUMAN FOOD CHAIN THREAT				
Likelihood of Release				
14. Likelihood of Release (Same Value as Line 5)	550	550		E
Waste Characteristics				
15. Toxicity/Persistence/Bioaccumulation	N/A	20	21	E
16. Hazardous Waste Quantity	N/A	100	7	E
17. Waste Characteristics (line 15 x 16, then assign a value from Table 2-7)	1,000	6		E
Targets				
18. Food Chain Individual	50	20	22	E
19. Population*				
19a. Level I Concentrations	N/A	0	23	E
19b. Level II Concentrations	N/A	0	23	E
19c. Potential Human Food Chain Contamination	N/A	0.31	24,see calc.	E
19d. Population (Lines 19a+19b+19c)	N/A	0.31		E
20. Targets (Lines 18c+19d)	N/A	23.1		E
Human Food Chain Threat Score				
21. Human Food Chain Threat [(Lines 14 x 17 x 20)/ 82,500, subject to a maximum of 100]	100	0.92		E

SURFACE WATER MIGRATION PATHWAY SCORESHEET (CONCLUDED)
Overland/Flood Component

Environmental Threat

Factor Categories	Maximum Value	Projected Score	Rationale	Data Quality
ENVIRONMENTAL THREAT				
Likelihood of Release				
22. Likelihood of Release (Same Value as Line 5)	550	550		E
Waste Characteristics				
23. Ecosystem Toxicity/Persistence/Bioaccumulation	N/A	$2x10^4$	25	E
24. Hazardous Waste Quantity	N/A	100	7	E
25. Waste Characteristics (lines 23 x 24, then assign a value from Table 2-7)	1,000	32		E
Targets				
26. Sensitive Environments*				
26a. Level I Concentrations	N/A	0	13	E
26b. Level II Concentrations	N/A	0	13	E
26c. Potential Contamination	N/A	0.0055	26	E
26d. Sensitive Environments (Lines 26a + 26b + 26c))	N/A	0.0055		E
27. Targets (Value from Line 26d)	N/A	0.0055		
Environmental Threat Score				
28. Environmental Threat [(Lines 22 x 25 x 27) / 82,500, subject to a maximum of 60]	60	$1.17x10^{-3}$		
SURFACE WATER OVERLAND/FLOOD COMPONENT SCORE FOR A WATERSHED				
29. Watershed Score** [(Lines 13+21+28), subject to a maximum of 100]	100	0.92		
SURFACE WATER OVERLAND/FLOOD COMPONENT SCORE				
30. Component Score** (S_{of}), (Highest of score from Line 29 for all watersheds evaluated, subject to a maximum of 100)	100	0.92		

* Use additional tables

** These scores are not to be rounded to the nearest integer.

SURFACE WATER PATHWAY CALCULATIONS

2. Potential to Release

	Sources	Minimum Size (Y / N)	Containment Factor (Table 4-2)
2a. Containment	Stack Emissions	Y	10

2b. Runoff	Value	Assigned Value
1. 2-year, 24-hour rainfall =	3.5 inches	3.5
2. Drainage Area = (Table 4-3)	310,000 acres	4
3. Soil Group = (Table 4-4)	sand, sandy clay, and gravel	B
4. Rainfall/Runoff Value (Table 4-5) =	---	4
5. Runoff Factor Value (Table 4-6) =	---	17

10. **Drinking Water Targets**

Actual Contamination						
Intake	Contaminant Detected	Concentration (Note Units)	Benchmark	(A) Apportioned Population Intake Serves	(B) Level* Multiplier	(A x B)

Sum (A x B) Level I _____ Sum (A x B) Level II _____

* Level Multipliers
Level I = 10
Level II = 1

SURFACE WATER OVERLAND/FLOOD MIGRATION COMPONENT CALCULATIONS (CONTINUED)

19. Population (Continued)

Potential Contamination					
Fishery	Production (lb/yr)	(P) Assigned Population Value (Table 4-18)	Average Stream Flow at Fishery (cfs)	(DW) Dilution Weighting Factor (Table 4-13)	(P x DW)
Humboldt Bay (silver salmon)	360,000	310	---	0.0001	0.031
Humboldt Bay (Chinook salmon)	120,000	310	---	0.0001	0.031
Janes Creek	6,000	3	5	1	3
Mad River	7,768	3	100-1,000	0.01	0.03

Sum (P x DW) = 3.092

Fisheries Subject to Potential Contamination = $\frac{\text{Sum (P x DW)}}{10}$ = 0.3092 (0.31)

26. Sensitive Environments

Actual Contamination						
Sensitive Environment or Wetland Length (Miles)	Contaminant	Concentration	Benchmark	(A) Assigned Value (Table 4-23 and/or 4-24)	(B) Level Multiplier*	(A x B)

Sum (A x B) Level I = _____ Sum (A x B) Level II = _____

* Level Multipliers

Level I = 10
Level II = 1

26. Sensitive Environments (Cont.)

Potential Contamination				
Sensitive Environment or Wetland Length (Miles)	**(A) Assigned Value (Table 4-23 and/or 4-24)**	**Average Stream Flow (cfs)**	**(DW) Dilution Weighting Factor (Table 4-13)**	**(A x DW)**
California Clapper Rail	75	NA	0.0001	0.0075
Snowy Plover	50	NA	0.0001	0.005
Humboldt Bay Owl's Clover	50	NA	0.0001	0.005
Tidewater Goby	50	NA	0.0001	0.005
Western Lily	50	NA	0.0001	0.005
Humboldt Bay Gumplant	50	NA	0.0001	0.005
Humboldt Bay National Wildlife Refuge	75	NA	0.0001	0.0075
Wetlands along Humboldt Bay	100	NA	0.0001	0.01
Point Reye's Bird's Beak	50	NA	0.0001	0.005

Sum of (A x DW) 0.055

Potential contamination $= \frac{\text{Sum (A x DW)}}{10} =$ 0.0055

Rationale

1. There is no indication that groundwater sampling has been conducted at the site and therefore an observed release cannot be documented. An observed release to groundwater is not expected to be documented because contaminated pond materials have been removed from the site.

2. There is evidence of hazardous migration from the source documented by formaldehyde and ammonia detected in the logging pond. (Brykarz, Helena, Ecology and Environment, Inc. Preliminary Assessment of Louisiana Pacific Corporation. August 30, 1990.)

3. The net precipitation in the Eureka area is approximately 23.94 inches. (U.S. Department of Commerce, NOAA. National Environmental Satellite Data and Information Services, National Climatic Data Center. Comparative Climatic Data for the United States Through 1985. Nashville, Tennessee.)

4. The depth to groundwater in the Arcata area ranges from 12 to 18 feet below ground surface. (U.S. Department of the Interior, Geological Survey. Water-Supply Paper 1470- Geology and Groundwater Features of the Eureka Area, Humboldt County, California. 1959.)

5. The site is located on an alluvial plain. A well log from a domestic well located approximately 0.5 mile west of the site indicates that the stratigraphy in the area consists of "soil" overlying shale and sandstone. Since the site is located on an alluvial plain, the "soil" was assumed to consist of silty clay, sand, and gravel, and a hydraulic conductivity of 10^{-4} was assigned. (U.S. Department of the Interior, Geological Survey. Water-Supply Paper 1470- Geology and Groundwater Features of the Eureka Area, Humboldt County, California. 1959.)

6. Toxicity/mobility is based on the fact that formaldehyde and ammonia are used in on-site processes and have been emitted from the facility in the past. (Brykarz, Helena, Ecology and Environment, Inc. Preliminary Assessment of Louisiana Pacific Corporation. August 30, 1990.)

7. Hazardous Waste Quantity:

   1,300 cubic yards of material were excavated from the site. 1,300 $yds^3/2.5 = 520$. Therefore, a value of 100 is assigned. (Smith, Elizabeth, Louisiana Pacific Corporation, to Kor, Benjamin, California Regional Water Quality Control Board. Letter. May 7, 1990.)

8. There are private, domestic wells located between 0.5 to 1 mile from the site. (California Department of Water Resources. Master Listing of Well Logs. March 16, 1990.)

9. There has been no level I or II groundwater contamination documented.

10.

Humboldt Bay Municipal Water District (HBMWD)		
Approximate Population Served by HBMWD: 60,000		
Water Source: 100% Groundwater		
Number of Wells in System: 5		
Approximate Population Served by HBMWD per Ring: 12,000		
Ring Distance (miles)	Number of Wells Within Ring	Estimated Population Served by Wells Within Ring
0-0.25	0	0
0.25-0.5	0	0
0.5-1	0	0
1-2	4	48,000
2-3	1	12,000
3-4	0	0

(Campbell, Laurie, Ecology and Environment, Inc., and Boli, Art, Humboldt Bay Municipal Water District. Telephone conversation. December 23, 1990; U.S. Department of the Interior, Geological Survey. Arcata North Quadrangle, California. 7.5-minute series, topographic. 1959, photorevised 1972.)

11. Groundwater in the area is used for irrigation. (California Department of Water Resources. Master Listing of Well Logs. March 16, 1990.)

12. It was assumed that the site is not located in a state designated wellhead protection area.

13. An observed release to surface water can be documented by direct observation. Prior to facility emission improvements, particulate matter containing formaldehyde, ammonia, and phenol was emitted from the facility and allowed to collect on the ground. Rain washed the contaminants into the nearby logging pond which on occassion, during a heavy rainfall amounts, overflowed into Janes Creek. Analyses of Janes Creek and the logging pond document levels of formaldehyde and ammonia to be present. (California Regional Water Quality Control Board, North Coast Region. Waste Discharge Requirements for Louisiana Pacific Corporation. January 30, 1986; California Regional Water Quality Control Board, North Coast Region. Executive Officer's Summary Report. January 30, 1986; Louisiana Pacific Corporation, Humboldt Flakeboard. Monthly Monitoring Reports.)

14. The two-year, 24-hour rainfall for the Eureka area is approximately 3.5 inches. The soil group was estimated to be B as soils in the area were determined to consist of a combination of sandy

clays, sand, and gravel. The drainage area of the Mad River Basin is approximately 310,000 acres. (U.S. Department of Commerce, NOAA, National Weather Service. NOAA Atlas II, Precipitation-Frequency Atlas of the Western United States, Volume XI-California, Page 37. Silver Springs, Maryland. 1973; U.S. Department of the Interior, Geological Survey. Water-Supply Paper 1470- Geology and Groundwater Features of the Eureka Area, Humboldt County, California. 1959; U.S. Department of the Interior, Geological Survey. Water Resource Data for the Mad River Basin. Water Year 1988.)

15. There are logging ponds located less than 100 feet from the facility. (U.S. Department of the Interior, Geological Survey. Arcata North Quadrangle, California. 7.5-minute series, topographic. 1959, photorevised 1982.)

16. There is no documentation indicating that the site has been certified by an engineer to be completely contained in the event of a flood.

17. The site is not located within a floodplain. (Brykarz, Helena, Ecology and Environment, Inc., and Tuttle, Don, Sutter County Department of Public Works. Telephone conversation. June 25, 1990.)

18. Toxicity/persistence was based on the fact that formaldehyde has been detected in an on-site surface water body. (Brykarz, Helena, Ecology and Environment, Inc. Preliminary Assessment of Louisiana Pacific Corporation. August 30, 1990.)

19. No drinking water is obtained from surface water bodies in the Arcata area. (Campbell, Laurie, Ecology and Environment, Inc., and Boli, Art, Humboldt Municipal Water District. Telephone conversation. December 23, 1990.)

20. There is no information indicating that near-by surface water bodies are used for any commercial purposes.

21. Toxicity/mobility/persistence/bioaccumulation is based on the fact that formaldehyde and phenols have been detected in on-site surface water. (Brykarz, Helena, Ecology and Environment, Inc. Preliminary Assessment of Louisiana Pacific Corporation. August 30, 1990.)

22. There has been no documentation of level I or II contamination of Janes Creek, however fish are caught from its waters. The flow rate of Janes Creek is approximtely 5 cubic feet per second in the winter months. (Peters, Belinda, ICF Technology, Inc., and Preston, Larry, California Department of Fish and Game. Telephone conversation. March 11, 1991; California Regional Water Quality Control Board, North Coast Region. Executive Officer's Summary Report. September 15, 1977.)

23. No background surface water samples have been taken; therefore, level I or II concentrations cannot be documented.

24. Humboldt Bay produces approximately 360,000 pounds of silver salmon and 120,000 pounds of Chinook salmon annually. A total of 7,768 pounds of steelhead, trout, salmon, and suckers are

caught each uear in the Mad River which has a flow rate of 100 to 1,000 cubic feet per second. No fish catch data is available for Janes Creek, so it was estimated: approximately 1 cutthroat exists for every meter in the creek, the fishable length of the creek is approximately 1,000 meters, and the average weight of a cutthroat is 6 pounds. Therefore, it is assumed that 6,000 pounds of cutthroat per year are caught from Janes Creek which has a flow rate of approximately 5 cubic feet per second. (Peters, Belinda, ICF Technology, Inc., and Preston, Larry, California Department of Fish and Game. Telephone conversation. March 11, 1991; Brykarz, Helena, Ecology and Environment, Inc., and Preston, Larry, California Department of Fish and Game. Telephone conversation. June 19, 1990; U.S. Department of the Interior, Geological Survey. Arcata North Quadrangle, California. 7.5-minute series, topographic. 1959, photorevised 1972.)

25. Ecosystem toxicity/mobility/persistence/bioaccumulation is based on the fact that formaldehyde and phenols have been detected in on-site surface water. (Brykarz, Helena, Ecology and Environment, Inc. Preliminary Assessment of Louisiana Pacific Corporation. August 30, 1990.)

26. The Humboldt Bay National Wildlife Refuge is located within 15 miles of the site. The federally designated endangered species, California clapper rail, and the federally proposed endangered species, Humboldt Bay owl's clover, Point Reye's bird's beak, Tidewater goby, western lily, Humboldt Bay gumplant, and snowy plover occupy havitats along surface water bodies located within 15 miles of the site. (U.S. Department of the Interior, Geological Survey. Arcata North Quadrangle, California. 7.5-minute series, topographic. 1959, photorevised 1972; California Department of Fish and Game, Natural Diversity Data Base. Arcata North, Arcata South, and Eureka Quadrangles, California. April 1, 1989; California Department of Fish and Game, Natural Diversity Data Base. Rare Finds. Arcata North, Arcata South, and Eureka Quadrangles, California. April 1990.)

caught each uear in the Mad River which has a flow rate of 100 to 1,000 cubic feet per second. No fish catch data is available for Janes Creek, so it was estimated: approximately 1 cutthroat exists for every meter in the creek, the fishable length of the creek is approximately 1,000 meters, and the average weight of a cutthroat is 6 pounds. Therefore, it is assumed that 6,000 pounds of cutthroat per year are caught from Janes Creek which has a flow rate of approximately 5 cubic feet per second. (Peters, Belinda, ICF Technology, Inc., and Preston, Larry, California Department of Fish and Game. Telephone conversation. March 11, 1991; Brykarz, Helena, Ecology and Environment, Inc., and Preston, Larry, California Department of Fish and Game. Telephone conversation. June 19, 1990; U.S. Department of the Interior, Geological Survey. Arcata North Quadrangle, California. 7.5-minute series, topographic. 1959, photorevised 1972.)

25. Ecosystem toxicity/mobility/persistence/bioaccumulation is based on the fact that formaldehyde and phenols have been detected in on-site surface water. (Brykarz, Helena, Ecology and Environment, Inc. Preliminary Assessment of Louisiana Pacific Corporation. August 30, 1990.)

26. The Humboldt Bay National Wildlife Refuge is located within 15 miles of the site. The federally designated endangered species, California clapper rail, and the federally proposed endangered species, Humboldt Bay owl's clover, Point Reye's bird's beak, Tidewater goby, western lily, Humboldt Bay gumplant, and snowy plover occupy havitats along surface water bodies located within 15 miles of the site. (U.S. Department of the Interior, Geological Survey. Arcata North Quadrangle, California. 7.5-minute series, topographic. 1959, photorevised 1972; California Department of Fish and Game, Natural Diversity Data Base. Arcata North, Arcata South, and Eureka Quadrangles, California. April 1, 1989; California Department of Fish and Game, Natural Diversity Data Base. Rare Finds. Arcata North, Arcata South, and Eureka Quadrangles, California. April 1990.)

SITE/INCIDENT FORM 1 (SI1)
09/17/90

U.S. E.P.A. SUPERFUND PROGRAM
CERCLIS SITE INFORMATION FORM (SIF)

ENFORCEMENT SENSITIVE INFORMATION
FOR INTERNAL USE ONLY

*SITE NAME: LOUISIANA PACIFIC CORP ARCATA
*EPA ID NO: CAD980673578 FMS SITE/SPILL ID: 09

S/I RPM-OSC NAME/PHONE: _____/(___)___-____
OTHER REG CONTACT NAME/PHONE: _____/(___)___-____

ALIAS NAME(S): _____, _____
_____, _____
_____, _____

*STREET: HWY 299
*CITY: ARCATA
*COUNTY: HUMBOLDT
*STATE: CA
*ZIP: 95521

*LATITUDE: 40/54/20.0
*LONGITUDE: 124/03/40.0
*LL SOURCE: R
*LL ACCURACY: _

CONGRESSIONAL DISTRICT: 02
*COUNTY CODE: 023
*SMSA: ____
USGS HYDRO UNIT: 18010102
FED AGENCY PRP FLG: N
STATE PRP FLAG: N
PRP AGENCY CODE: ____, ____, ____, ____, ____, ____.

*FED. FACILITY FLAG: N
*RCRA FACILITY FLAG: _
NO FURTHER ACTION FLAG: _
DIOXIN TIER: _____
SITE NAME SOURCE: R
MUNICIPAL PRP FLAG: N
COST RECOVERY IND: E

AGGREGATE CASE BUDGET OBLIGATIONS: _____
AGGREGATE FUND OBLIGATIONS: TBD

*SITE/INCIDENT ABSTRACT: _____
_____
_____
_____

*SITE CLASSIFICATION: __

(NG) FUND LEAD/NEGOT
(FE) FEDERAL ENFORCEMENT
(F) FUND LEAD/NO NEGOT
(ND) NO DETERMINATION(DEFAULT)
(SE) STATE ENFORCEMENT

*CORE DATA ELEMENT OR CODE
@ USACE OWNED SUBEVENT

ANY QUESTIONS? CALL CSC CERCLIS STAFF

ACTION:_____(CSC ONLY)

SITE/INCIDENT FORM 2 (SI2)
09/17/90

U.S. E.P.A. SUPERFUND PROGRAM
CERCLIS SITE INFORMATION FORM (SIF)

ENFORCEMENT SENSITIVE INFORMATION
FOR INTERNAL USE ONLY

*SITE NAME: LOUISIANA PACIFIC CORP ARCATA
*EPA ID NO: CAD980673578 FMS SITE/SPILL ID: 09

S/I RPM-OSC NAME/PHONE: _____/(___)___-____
OTHER REG CONTACT NAME/PHONE: _____/(___)___-____

*ENTRY NPL/STATUS INDICATOR: N

*PROPOSED NPL UPDATE NO: __

*FINAL NPL UPDATE NO: __

(S) PRE-PROPOSAL TO NPL
(P) SITE CURRENTLY PROPOSED FOR THE NPL
(R) SITE REMOVED FROM THE PROPOSED NPL
(F) SITE CURRENTLY ON THE NPL
(D) SITE DELETED FROM NPL
(N) SITE IS NOT CURRENTLY NOR WAS FORMERLY ON THE PROPOSED OR FINAL NPL
(O) NON SITE: A SITE/INCIDENT WHICH WILL NOT COUNT IN THE INVENTORY OR IN STATISTICAL REPORTS

*SITE CATEGORY: _

(A) ABANDONED
(B) CHEM. PLANT/IND REF
(C) CITY CONTAMINATION
(D) DIOXIN
(F) FEDERAL FACILITY
(G) GROUND WATER
(H) HOUSING AREA/FARM
(I) IND. WASTE TREATMENT
(J) INORGANIC WASTE
(L) LANDFILL
(M) MANUFACTURING PLANT
(N) MILITARY RELATED
(O) OTHER
(P) PURE LAGOONS
(R) RADIOACTIVE SITE
(T) MINES/TAILING
(V) WATERWAYS/CREEKS/RIVERS
(W) WELLS

*OWNERSHIP INDICATOR: UN

(PR) PRIVATELY OWNED
(CO) COUNTY OWNED
(IL) INDIAN LANDS
(FF) FED. OWNED
(DI) DISTRICT OWNED
(MX) MIXED OWNERSHIP
(ST) STATE OWNED
(MN) MUNICIPALITY OWNED
(OH) OTHER
(UN) UNKNOWN

*INCIDENT TYPE: (FOR REMOVAL OSC'S ONLY) _

(O) OIL SPILL OCCURING AT A LOCATION NOT PREVIOUSLY IDENTIFIED AS A CERCLIS SITE
(N) SPILL (OTHER THAN OIL) OR OTHER REMOVAL AT A LOCATION NOT PREVIOUSLY IDENTIFIED AS A CERCLIS SITE

*CORE DATA ELEMENT OR CODE
@ USACE OWNED SUBEVENT

ANY QUESTIONS? CALL CSC CERCLIS STAFF

ACTION:_____(CSC ONLY)

SITE/INCIDENT COMMENTS (SIC)
09/17/90

U.S. E.P.A. SUPERFUND PROGRAM
CERCLIS SITE INFORMATION FORM (SIF)

ENFORCEMENT SENSITIVE INFORMATION
FOR INTERNAL USE ONLY

*SITE NAME: LOUISIANA PACIFIC CORP ARCATA
*EPA ID NO: CAD980673578 FMS SITE/SPILL ID: 09

S/I RPM-OSC NAME/PHONE: _____/(___)___-____
OTHER REG CONTACT NAME/PHONE: _____/(___)___-____

CSC USE	COMMENT TYPE	GROUP NUMBER	LINE NUMBER	*COMMENT
--------		001	01	PENDING: REFERRAL TO TSCA 84/05/08.
--------	__	___	__	_____
--------	__	___	__	_____
--------	__	___	__	_____
-------	__	___	__	_____

*CORE DATA ELEMENT OR CODE
@ USACE OWNED SUBEVENT

ANY QUESTIONS? CALL CSC CERCLIS STAFF

ACTION:_____(CSC ONLY)

REGIONAL UTILITIES (RUT)
09/17/90

U.S. E.P.A. SUPERFUND PROGRAM
CERCLIS SITE INFORMATION FORM (SIF)

ENFORCEMENT SENSITIVE INFORMATION
FOR INTERNAL USE ONLY

*SITE NAME: LOUISIANA PACIFIC CORP ARCATA
*EPA ID NO: CAD980673578 FMS SITE/SPILL ID: 09

S/I RPM-OSC NAME/PHONE: _____/(___)___-____
OTHER REG CONTACT NAME/PHONE: _____/(___)___-____

CSC USE	REGIONAL UTILITY CODE	DESCRIPTION	DATE 1 MM/DD/YY	DATE 2 MM/DD/YY	DATE 3 MM/DD/YY	FREE FIELD
---	HSCP01	PCB'S	/ /	/ /	/ /	
---	9ERR01	ERRIS SITE	/ /	/ /	/ /	
---	9INT01	TSCA INSP	03/12/85	/ /	/ /	
---	9REF01	REFERRAL TO TSCA	05/08/84	/ /	/ /	

---						

*CORE DATA ELEMENT OR CODE
@ USACE OWNED SUBEVENT

ANY QUESTIONS? CALL CSC CERCLIS STAFF

ACTION:_____(CSC ONLY)

U.S. E.P.A. SUPERFUND PROGRAM
CERCLIS SITE INFORMATION FORM (SIF)

ENFORCEMENT SENSITIVE INFORMATION
FOR INTERNAL USE ONLY

*SITE NAME: LOUISIANA PACIFIC CORP ARCATA
*EPA ID NO: CAD980673578 FMS SITE/SPILL ID: 09

S/I RPM-OSC NAME/PHONE: _____/(___)___-____
OTHER REG CONTACT NAME/PHONE: _____/(___)___-____

*OPERABLE UNIT IND: 00 *OPERABLE UNIT NAME: SITE EVAL/DISP

*OPERABLE UNIT DESCRIPTION: _____

*OPERABLE UNIT IND: ___ *OPERABLE UNIT NAME: _____

*OPERABLE UNIT DESCRIPTION: _____

*OPERABLE UNIT IND: ___ *OPERABLE UNIT NAME: _____

*OPERABLE UNIT DESCRIPTION: _____

NOTE: *FOR PREREMEDIAL AND REMOVAL EVENTS, OPERABLE UNIT INDICATOR = 00.
*FOR REMEDIAL EVENTS, ASSIGN OPERABLE UNIT INDIICATORS BEGINNING WITH 01.
*AN "ALIAS LINK" LINKS AN OPERABLE UNIT WITH A SPECIFIC ALIAS

*CORE DATA ELEMENT OR CODE
@ USACE OWNED SUBEVENT

ANY QUESTIONS? CALL CSC CERCLIS STAFF

ACTION:_____(CSC ONLY)

PREREMEDIAL
INFORMATION (EVT/SVT/FIN)
09/17/90

U.S. E.P.A. SUPERFUND PROGRAM
CERCLIS SITE INFORMATION FORM (SIF)

ENFORCEMENT SENSITIVE INFORMATION
FOR INTERNAL USE ONLY

*SITE NAME: LOUISIANA PACIFIC CORP ARCATA
*EPA ID NO: CAD980673578 FMS SITE/SPILL ID: 09

S/I RPM-OSC NAME/PHONE: _____/(___)___-____
EVENT REGIONAL CONTACT NAME/PHONE: _____/(___)___-____
OTHER REG CONTACT NAME/PHONE: _____/(___)___-____

*OP UNIT *EVENT SUBEVENT TYPE	*OP UNIT NAME *EVENT NAME *SUBEVENT NAME	LEAD	<----START----> PLAN (MM/DD/YY)	*PLAN (FY/Q)	*ACTUAL (MM/DD/YY)	<---- COMPLETE ----> PLAN (MM/DD/YY)	*PLAN (FY/Q)	*ACTUAL (MM/DD/YY)	PLANNING STATUS	SCAP NOTE
00	SITE EVAL/DISP									
DS1	DISCVRY	1	F __/__/__	__/_	__/__/__	__/__/__	__/_	03/01/82	_	_____
*EVENT QUALIFIER: _										
PA1	PA	1	F __/__/__	__/_	__/__/__	__/__/__	__/_	05/01/84	_	_____
*EVENT QUALIFIER: _										
PA2	PA	2	F __/__/__	__/_	__/__/__	__/__/__	__/_	09/12/90	_	_____
*EVENT QUALIFIER: H										

STATE OF CALIFORNIA
GEORGE DEUKMEJIAN, *Governor*

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD—
NORTH COAST REGION
1440 GUERNEVILLE ROAD
SANTA ROSA, CA 95403
Phone: (707) 576-2220

July 27, 1988

Mr. Kelly Stalker
Louisiana-Pacific Corporation
P.O. Box 158
Samoa, CA 95564

Dear Mr. Stalker:

On April 29, 1988, I inspected the Louisiana-Pacific, Humboldt Flakeboard plant. Liz Smith of your office accompanied me during the inspection. The purpose of the inspection was to collect samples of the discharge to and from the marsh since the February monitoring report contained 110 ppb of formaldehyde. The plant was not in operation during the inspection but chemical trucks were being unloaded and maintenance crews were washing down lines to the scrubers. There was no discharge from the weir but I did collect samples of the water flowing into the discharge culvert below the weir, the wash water from the cleaning operation and the discharge from the sump at the discharge line. Results of the sampling are as follows:

Location	Ammonia(mg/l)	Formaldehyde(mg/l)	Phenols(mg/l)
Wash Water	6.5	63	0.17
Sump Discharge	16	39	0.14
Culvert Below Weir	NS*	1.2	NS*

*NS - Not Sampled

The original samples of the sump discharge and wash water contained a large amount of settleable material. I requested the lab to filter samples then run formaldehyde again and obtained the following results:

Location	Formaldehyde(unfiltered)	Formaldehyde(filtered)
Wash Water	63	7.3
Sump Discharge	39	5.2

The concentrations of all constituents are significant. It appears that much of the formaldehyde (and probably phenols) is contained in the fines in the wash water and sump.

Finding 7 of Waste Discharge Requirements for Louisiana-Pacific Corporation, Humboldt Flakeboard (Order No. 86-2) states:

"7. The following wastewaters generated by the discharger are considered process waste water pollutants:

a. domestic waste
b. boiler blowdown
c. washwaters containing urea, formaldehyde, phenol, latex sealer and other glue wastes
d. effluent from the clarifier for the wet scrubber air pollution control

Ref #17

All process waste waters are discharged to the City of Arcata sewage treatment system with the exception of the clarifier effluent which is recycled through the air pollution control system."

Prohibition 1 of Order No. 86-2 states:

"1. The discharge of process wastewater pollutants, as described in Finding 7, to the pond/marsh system or to Janes Creek is prohibited."

The discharge of wash water which I observed and sampled is in violation of Order No. 86-2. Discharge from washing operations which may contain the pollutants of concern must not be discharged to the marsh. It is my understanding that the plant is in the process of upgrading the air pollution equipment which should help rectify the problem by eliminating stray particulates which bypass the current equipment.

Pursuant to Section 13267(b) of the California Water Code, please submit a report to this office by August 23, 1988, which describes the following:

1. The frequency of washing operations which discharge to the sump.

2. What measures you will take to prevent future violations of Prohibition 1 of Waste Discharge Requirements Order No. 86-2.

I am enclosing a copy of my April 29, 1988, inspection memo and the lab results for your information. If you have any questions please call me.

Sincerely,

Mark H. Harvey
Water Resource Control Engineer

MHH:mkk

Enclosures

cc: Liz Smith
Art Green

LOUISIANA-PACIFIC CORPORATION
HUMBOLDT FLAKEBOARD

86002

MONITORING REPORT FOR THE MONTH OF JANUARY, 1988

DATE	POND OVERFLOW (MGD)
1	
2	
3	
4	.05
5	.05
6	.07
7	.07
8	.10
9	
10	
11	.10
12	.14
13	.18
14	.42
15	.38
16	
17	
18	.35
19	.26
20	.18
21	.16
22	.10
23	
24	
25	.06
26	.06
27	.05
28	.05
29	
30	
31	

315.48

DATE OF SAMPLE 7 JAN 88

pH	7.5	
BOD	7	mg/l
NFR	3	mg/l
Set. Solids	<0.1	ml/l/hr
Bioassay	100	% survival
Ammonia	2.2	mg/l = .04 mg/l NH3
Formaldehyde	0.087	mg/l
Phenol	*	mg/l

2% NH3
98% NH4

.4 mg/l NH3 constitute a hazard to marine biota CO2 levels less than .01 mg/l present minimal risk of deleterious effects

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Signature: Art Green
Title: Plant Manager

* SEE LAB SHEET: PHENOL IN PROGRESS

FEB 8 1988

Ref #18

LOUISIANA-PACIFIC CORPORATION
HUMBOLDT FLAKEBOARD
86-002

MONITORING REPORT FOR THE MONTH OF DECEMBER, 1988

DATE	POND OVERFLOW (MGD)
1	.14
2	.10
3	
4	
5	.05
6	.05
7	.05
8	.04
9	.04
10	.03
11	
12	.02
13	.02
14	.02
15	.02
16	.02
17	
18	
19	.02
20	.02
21	.10
22	.26
23	.26
24	
25	
26	.29
27	.42
28	.59
29	.42
30	.39
31	

DATE OF SAMPLE 12-2-88

pH	6.4	
BOD	9	mg/l
NFR	4	mg/l
Set. Solids	ND	ml/l/hr
Bioassay	90	% survival
Ammonia	2.9	mg/l
Formaldehyde	98	mg/l
Phenol	ND	mg/l

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Signature: Don Rawback
Title: Superintendent

JAN 05 1989

2-17-89 KDW

LOUISIANA-PACIFIC CORPORATION
HUMBOLDT FLAKEBOARD
86-002

MONITORING REPORT FOR THE MONTH OF JANUARY, 1989

DATE	POND OVERFLOW (MGD)
1	
2	.29
3	.20
4	.20
5	.23
6	.23
7	
8	
9	.32
10	.42
11	.32
12	.26
13	.23
14	
15	
16	.18
17	.14
18	.10
19	.10
20	
21	
22	
23	.18
24	.16
25	.14
26	.12
27	.09
28	
29	
30	.07
31	.06

DATE OF SAMPLE 1/12/89

pH	6.4	
BOD	12	mg/l
NFR	17	mg/l
Set. Solids	<0.1	ml/l/hr
Bioassay	90	% survival
Ammonia	2.5	mg/l
Formaldehyde	<10 ug/l	~~mg/l~~
Phenol	<0.1	mg/l

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Signature: Art Green
Title: Plant Manager

LOUISIANA-PACIFIC CORPORATION
HUMBOLDT FLAKEBOARD
86-002

MONITORING REPORT FOR THE MONTH OF FEBRUARY, 1989

PULP MODERNIZATION PROJECT

DATE	POND OVERFLOW (MGD)
1	.06
2	.07
3	.07
4	.07
5	.07
6	.07
7	.06
8	.05
9	.05
10	.05
11	
12	
13	.04
14	.04
15	.03
16	.03
17	.02
18	
19	
20	.04
21	.03
22	.05
23	.06
24	.07
25	
26	
27	.05
28	.04
29	
30	
31	

DATE OF SAMPLE 2-2-89

pH	6.7	
BOD	9	mg/l
NFR	6	mg/l
Set. Solids	N.D.	ml/l/hr
Bioassay	100	% survival
Ammonia	3.7	mg/l
Formaldehyde	15	mg/l
Phenol	N.D.	mg/l

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Signature: Art Green
Title: Plant Manager

LOUISIANA-PACIFIC CORPORATION
HUMBOLDT FLAKEBOARD
86-002

MONITORING REPORT FOR THE MONTH OF March, 1989

DATE	POND OVERFLOW (MGD)
1	.04
2	.05
3	.10
4	
5	
6	.12
7	.12
8	.12
9	.14
10	.18
11	
12	
13	.18
14	.16
15	.16
16	.18
17	.20
18	
19	
20	.16
21	.23
22	.26
23	.20
24	.29
25	
26	
27	.20
28	.20
29	.16
30	.14
31	

DATE OF SAMPLE 3-9-89

pH	7.2	
BOD	9	mg/l
NFR	11	mg/l
Set. Solids	ND	ml/l/hr
Bioassay	100	% survival
Ammonia	7.6	mg/l
Formaldehyde	.39	mg/l
Phenol	ND	mg/l

K
4-19-89

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Signature: Art Green
Title: Plant Manager

LOUISIANA-PACIFIC CORPORATION
HUMBOLDT FLAKEBOARD

MONITORING REPORT FOR THE MONTH OF APRIL, 1989

DATE	POND OVERFLOW (MGD)
1	
2	
3	.23
4	.18
5	.16
6	.14
7	.10
8	
9	
10	.07
11	.07
12	.06
13	.06
14	.05
15	
16	
17	.03
18	.02
19	.02
20	.03
21	
22	
23	
24	.06
25	.05
26	.05
27	.04
28	.04
29	
30	
31	

DATE OF SAMPLE 4-12-89

pH 6.8
BOD 8 mg/l
NFR 6 mg/l
Set. Solids N/D ml/l/hr
Bioassay 90 % survival
Ammonia 9.0 mg/l
Formaldehyde ____ mg/l
Phenol N/D mg/l

[illegible] CONTROL BOARD

MAY 24 '89

[illegible] 5-25-89

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Signature: [signature]
Title: Plant Manager

LOUISIANA-PACIFIC CORPORATION
HUMBOLDT FLAKEBOARD
86-002

MONITORING REPORT FOR THE MONTH OF MAY, 1989

DATE	POND OVERFLOW (MGD)
1	
2	
3	.02
4	.02
5	.02
6	
7	
8	TRACE
9	TRACE
10	.01
11	.01
12	.01
13	
14	
15	TRACE
16	TRACE
17	TRACE
18	TRACE
19	TRACE
20	
21	
22	
23	TRACE
24	TRACE
25	.01
26	.01
27	
28	
29	
30	.01
31	.01

DATE OF SAMPLE 5-9-89

pH	6.9	
BOD	17	mg/l
NFR	5	mg/l
Set. Solids	ND	ml/l/hr
Bioassay		% survival
Ammonia	9.2	mg/l
Formaldehyde	20	mg/l
Phenol	ND	mg/l

JUN 16 '89

K- 6-19-89

RC ☐ REPLY

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Signature: Art Green
Title: Plant Manager

1989

LOUISIANA-PACIFIC CORPORATION
HUMBOLDT FLAKEBOARD
86-002

MONITORING REPORT FOR THE MONTH OF JANUARY, 1990

DATE	POND OVERFLOW (MGD)
1	
2	
3	
4	
5	
6	
7	
8	.02
9	.02
10	.02
11	.01
12	.01
13	
14	
15	.05
16	.10
17	.10
18	.10
19	.07
20	
21	
22	.06
23	.05
24	.04
25	.04
26	.05
27	
28	
29	.07
30	.07
31	.10

DATE OF SAMPLE 1-9-90

pH	6.8	
BOD	37	mg/l
NFR	6	mg/l
Set. Solids	ND	ml/l/hr
Bioassay	90	% survival
Ammonia	1.1	mg/l
Formaldehyde	ND	mg/l
Phenol	ND	mg/l

WATER QUALITY CONTROL BOARD
RECEIVED
FEB 16 '90

☐ BK ___ ☐ RK ___
☐ CJ ___ ☐ LR ___
☐ FR ___ ☐ BB ___
☐ RT ___ ☐ KO ___
☐ JH ___ ☐ DJS ___
☐ ___ ☐ MA ___
☐ ___ ☐ REPLY
☐ ALL STAFF ☐ FILE

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Signature: Art Green
Title: Plant Manager

FEB 05 1990

LOUISIANA-PACIFIC CORPORATION
HUMBOLDT FLAKEBOARD
86-002

K 3/20/90

MONITORING REPORT FOR THE MONTH OF FEBRUARY, 1990

DATE	POND OVERFLOW (MGD)
1	.14
2	.18
3	
4	
5	.18
6	.23
7	.20
8	.23
9	.29
10	
11	.16
12	.34
13	.28
14	.25
15	.25
16	.25
17	
18	
19	.20
20	.19
21	.18
22	.18
23	.18
24	
25	
26	.18
27	.18
28	.18
29	
30	
31	

DATE OF SAMPLE FEB. 2-90

pH	6.6	
BOD	14	mg/l
NFR	4	mg/l
Set. Solids	ND	ml/l/hr
Bioassay	100	% survival
Ammonia	3.0	mg/l
Formaldehyde	57	mg/l
Phenol	ND	mg/l

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Signature: Art Green
Title: Plant Manager

LOUISIANA-PACIFIC CORPORATION
HUMBOLDT FLAKEBOARD
86-002

MONITORING REPORT FOR THE MONTH OF MARCH, 1990

DATE	POND OVERFLOW (MGD)
1	.18
2	.18
3	.18
4	
5	
6	.18
7	.18
8	.18
9	.18
10	
11	
12	.18
13	.18
14	.18
15	.18
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
26	.158
27	.158
28	.158
29	.158
30	.158
31	

DATE OF SAMPLE 2-27-90

pH	6.3	
BOD	11	mg/l
NFR	9	mg/l
Set. Solids	ND	ml/l/hr
Bioassay	100	% survival
Ammonia	3.3	mg/l
Formaldehyde	10	mg/l
Phenol	ND	mg/l

K-4-16-90

MA

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Signature: Don Rawbach
Title: Production Superintendent

LOUISIANA-PACIFIC CORPORATION
HUMBOLDT FLAKEBOARD
86-002

MONITORING REPORT FOR THE MONTH OF APRIL, 1990

DATE	POND OVERFLOW (MGD)
1	
2	.158
3	.158
4	.158
5	.158
6	.158
7	
8	
9	.158
10	.158
11	.158
12	.158
13	.158
14	
15	
16	NO
17	
18	
19	DISCHARGE
20	
21	
22	
23	
24	
25	
26	
27	
28	
29	
30	
31	

DATE OF SAMPLE 4-11-90

pH	6.6	
BOD	ND	mg/l
NFR	22	mg/l
Set. Solids	ND	ml/l/hr
Bioassay	100	% survival
Ammonia	4.2	mg/l
Formaldehyde		mg/l
Phenol	ND	mg/l

5-9-90 TEST RESULTS NOT YET RECEIVED.

RECEIVED
MAY 17 1990
K-5-17-90

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Signature: Art Green
Title: Plant Manager

NORTH COAST LABORATORIES LTD.

5680 WEST END ROAD • ARCATA • CA 95521 • (707) 822-4649

Date: 31 March 1987

Report to: Water Quality Control Board
1400 Guerneville Road
Santa Rosa, CA 95401

Attn: Cathy Goodwin Phone:

Date Received: 03-04-87 Date Sampled: 03-04-87

☐ BK ☐ RG
☐ CJ ☐
☐ FR ☐
☐ RT ☐ C+G
☐ JH ☐
☐ BB ☐
☐ JG ☐ REPLY
☐ ALL STAFF ☐ FILE

CHEMICAL EXAMINATION REPORT

SAMPLE DESCRIPTION	NCL #	PARAMETER	RESULTS
LPHF 2 Pond	29296	Formaldehyde	<50 ug/l
LPHF 3 Pond	29297	Formaldehyde	<50 ug/l

Comments:

Project Chemist: Anlab

Checked By

Jesse G. Chaney, Jr.
Laboratory Director

Typed By:vav

NORTH COAST LABORATORIES LTD.

5680 WEST END ROAD • ARCATA • CA 95521 • (707) 822-4649

Date: 17 March 1987

Report to: Water Quality Control Board
1440 Guerneville Road
Santa Rosa, CA 95401
Attn: Cathy Goodwin Phone:

Sample Description: LPHF 3 POND

NCL #: 29297 Sampled by:

Date Received: 03-04-87 Date Sampled: 03-04-87

CHEMICAL EXAMINATION REPORT

PARAMETER	RESULT	UNITS
Phenols	0.2	mg/l
Formaldehyde	IN PROGRESS	

Comments:

Project Chemist: LL

Checked By

Jesse G. Chaney, Jr.
Laboratory Director

Typed By: vav

NORTH COAST LABORATORIES LTD.

5680 WEST END ROAD • ARCATA • CA 95521 • (707) 822-4649

Date: 13 March 1987

Report to: Water Quality Control Board
1440 Guerneville Road
Santa Rosa, CA 95401
Attn: Cathy Goodwin

CRG

Sample Description: LPHF 1 Pond

NCL #: 29295 Sampled by:

Date Received: 03-04-87 Date Sampled: 03-04-87

FISH BIOASSAY REPORT

Test Species: Salmo gairdnerii

Results: 60% in 100% Sample

Survival:

	24 Hours	48 Hours	72 Hours	96 Hours
Control	100%	100%	100%	100%
100% Sample	100%	100%	80%	60%

Comments:

Project Chemist: CS

Checked By

Jesse G. Chaney, Jr.
Laboratory Director

Typed By: vav

File LP Humboldt Flakeboard

NORTH COAST LABORATORIES LTD.

5680 WEST END ROAD • ARCATA • CA 95521 • (707) 822-4649

Date: 31 March 1987

Report to: Water Quality Control Board
1440 Guerneville Road
Santa Rosa, CA 95401

Attn: Cathy Goodwin Phone:

Sample Description: LPHF 1 Pond

NCL #: 29289 Sampled by:

Date Received: 03-04-87 Date Sampled: 03-04-87

BK ☐ RC ☐
CJ ☐ ☐
FR ☐ ☐ CAG
RT ☐ ☐
JH ☐ ☐
BB ☐ ☐
JG ☐ ☐ REPLY
☐ ☐ FILE

CHEMICAL EXAMINATION REPORT

PARAMETER	RESULT	UNITS
Ammonia as N	4.2	mg/l
NFR	<1	mg/l
BOD	<5	mg/l
pH	6.7	pH Units
Solids-Settleable	<0.1	ml/l/hr
Formaldehyde	<50	ug/l
Phenols	<0.1	mg/l

Comments:

Project Chemist: LL; Anlab (Formaldehyde)

Checked By JPN

Paige Noon (for JGC)
Jesse G. Chaney, Jr.
Laboratory Director

Typed By:vav

NORTH COAST LABORATORIES LTD.

5680 WEST END ROAD • ARCATA • CA 95521 • (707) 822-4649

Date: 04 August 1987

Report to: Louisiana Pacific Corp.
P.O. Box 158
Samoa, CA 95564
Attn: Kelly Stalker

Sample Description: ARCATA FLAKEBOARD / Spring - Water

NCL #: 35500

Date Received: 06-23-87 Date Sampled: 06-23-87

AMENDED CHEMICAL EXAMINATION REPORT

PARAMETER	RESULT	UNITS
Formaldehyde	38	ug/L

Comments:

The Department of Health Services and the EPA does not currently approve of any method of formaldehyde analysis.

Project Chemist: Anlab

QA Check: [signature]

Jesse C. Chaney, Jr.
Laboratory Director

Typed By: vav

AUG 12 1987

NORTH COAST LABORATORIES LTD.

5680 WEST END ROAD • ARCATA • CA 95521 • (707) 822-4649

Date: 08 July 1987

Page 1 of 1

Report to: Water Quality Control Board
1440 Guerneville Road
Santa Rosa, CA 95401

Attn: Cathy Goodwin

Phone:

CHEMICAL EXAMINATION REPORT

	SAMPLE DESCRIPTION	NCL #	DATE RECEIVED	DATE SAMPLED	PARAMETER	RESULTS	
①	UPCULVERT	35520	06-24-87	06-24-87	Ammonia-N	0.2	mg/L
⑨	POND	35521	06-24-87	06-24-87	Ammonia-N	<0.1	mg/L
⑧	3WConf	35522	06-24-87	06-24-87	Ammonia-N	0.6	mg/L
⑦	3WJanes	35523	06-24-87	06-24-87	Ammonia-N	<0.1	mg/L
②	LPHFPOND	35524	06-24-87	06-24-87	Ammonia-N	30	mg/L
④	LPDITCH	35525	06-24-87	06-24-87	Ammonia-N	0.8	mg/L
③	LPHF1	35526	06-24-87	06-24-87	Ammonia-N	1.0	mg/L
⑥	3WDITCH	35527	06-24-87	06-24-87	Ammonia-N	1.0	mg/L

All samples were collected at or around Louisiana-Pacific Humboldt Flakeboard Mill - See Map identifying specific locations

Project Chemist: LL

Checked By

Jesse G. Chaney, Jr.
Laboratory Director

Typed By:vav

File LP Humboldt Timber

NORTH COAST LABORATORIES LTD.

5680 WEST END ROAD • ARCATA • CA 95521 • (707) 822-4649

Date: 08 July 1987

Page 1 of 1

Report to: Water Quality Control Board
1440 Guerneville Road
Santa Rosa, CA 95401

Attn: Cathy Goodwin

Phone:

BK ___ RN ___
GW ___ CHAD
FR ___ ___
RT ___ ___
JH ___ ___
BB ___ ___
JC ___ MPP
___ ___

CHEMICAL EXAMINATION REPORT

SAMPLE DESCRIPTION	NCL #	DATE RECEIVED	DATE SAMPLED	PARAMETER	RESULTS ug/L
PLWELL2	35665	06-26-87	06-25-87	Pentachlorophenol	<1
				Tetrachlorophenol	<1
ⓑ UPJANES	35672	06-26-87	06-25-87	Ammonia - N	0.1 mg/L

Project Chemist: RS, LL

Checked By

Jesse G. Chaney, Jr.
Laboratory Director

Typed By:vav

Entered PCP/TCP data on well sample reporting form

NORTH COAST LABORATORIES LTD.

5680 WEST END ROAD • ARCATA • CA 95521 • (707) 822-4649

JUL 1 - '87

CAG

Date: 08 July 1987

Page 1 of 1

Report to: Water Quality Control Board
1440 Guerneville Road
Santa Rosa, CA 95401

Attn: Cathy Goodwin

Phone:

CHEMICAL EXAMINATION REPORT

	SAMPLE DESCRIPTION	NCL #	DATE RECEIVED	DATE SAMPLED	PARAMETER	RESULTS	
①	UPCULVERT	35520	06-24-87	06-24-87	Ammonia-N	0.2	mg/L
⑨	POND	35521	06-24-87	06-24-87	Ammonia-N	<0.1	mg/L
⑧	3WConf	35522	06-24-87	06-24-87	Ammonia-N	0.6	mg/L
⑦	3WJanes	35523	06-24-87	06-24-87	Ammonia-N	<0.1	mg/L
②	LPHFPOND	35524	06-24-87	06-24-87	Ammonia-N	30	mg/L
④	LPDITCH	35525	06-24-87	06-24-87	Ammonia-N	0.8	mg/L
③	LPHF1	35526	06-24-87	06-24-87	Ammonia-N	1.0	mg/L
⑤	3WDITCH	35527	06-24-87	06-24-87	Ammonia-N	1.0	mg/L

Project Chemist: LL

Checked By

Jesse G. Chaney, Jr.
Laboratory Director

Typed By:vav

NORTH COAST LABORATORIES LTD.

5680 WEST END ROAD • ARCATA • CA 95521 • (707) 822-4649

Date: 08 July 1987

Page 1 of 1

Report to: Water Quality Control Board
1440 Guerneville Road
Santa Rosa, CA 95401

Attn: Cathy Goodwin

Phone:

☐ BK ☐ RK
☐ GI ☐
☐ FR ☐
☐ RT ☐
☐ JH ☐
☐ BB ☐
☐ JW ☐ MS/SP
☐ ☐ FW

CHEMICAL EXAMINATION REPORT

SAMPLE DESCRIPTION	NCL #	DATE RECEIVED	DATE SAMPLED	PARAMETER	RESULTS ug/L
PLWELL2	35665	06-26-87	06-25-87	Pentachlorophenol	<1
				Tetrachlorophenol	<1
⑥ UPJANES	35672	06-26-87	06-25-87	Ammonia - N	0.1 mg/L

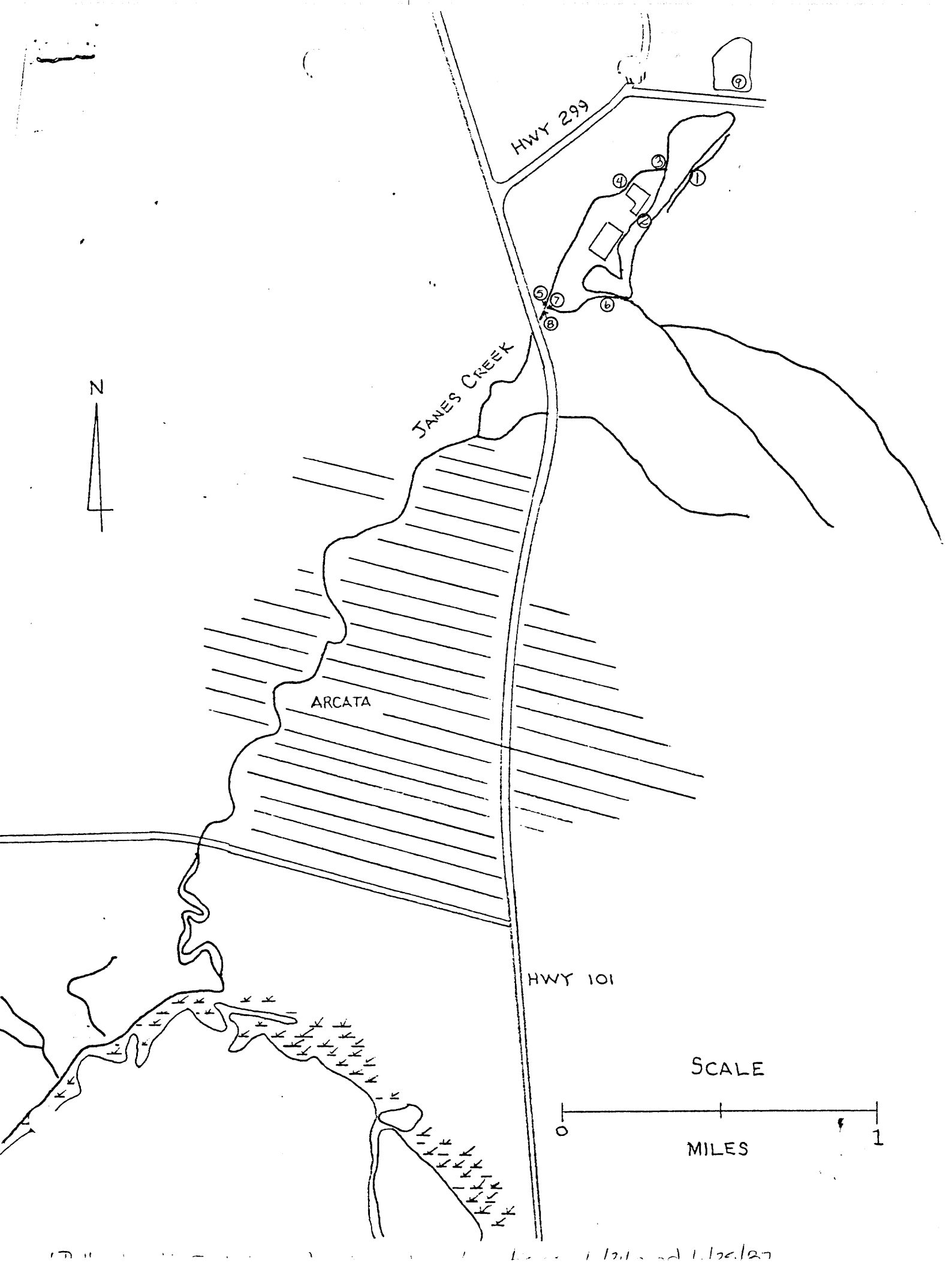
Project Chemist: RS, LL

Checked By

Jesse G. Chaney, Jr.
Laboratory Director

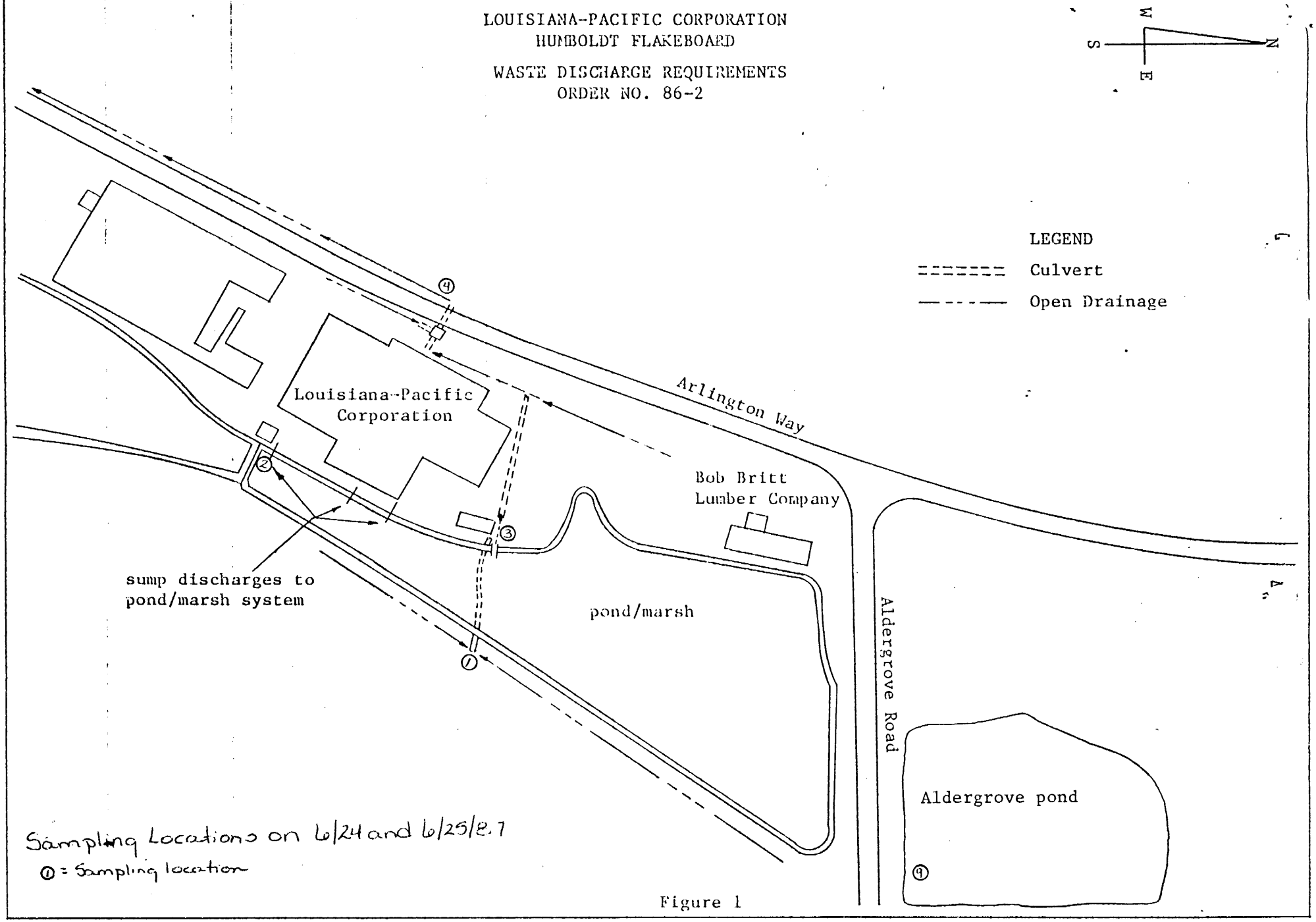
Typed By:vav

Entered PCP/TCP data on well sample reporting form


HWY 299
JANES CREEK
N
ARCATA
HWY 101
SCALE
0
1
MILES

LOUISIANA-PACIFIC CORPORATION
HUMBOLDT FLAKEBOARD

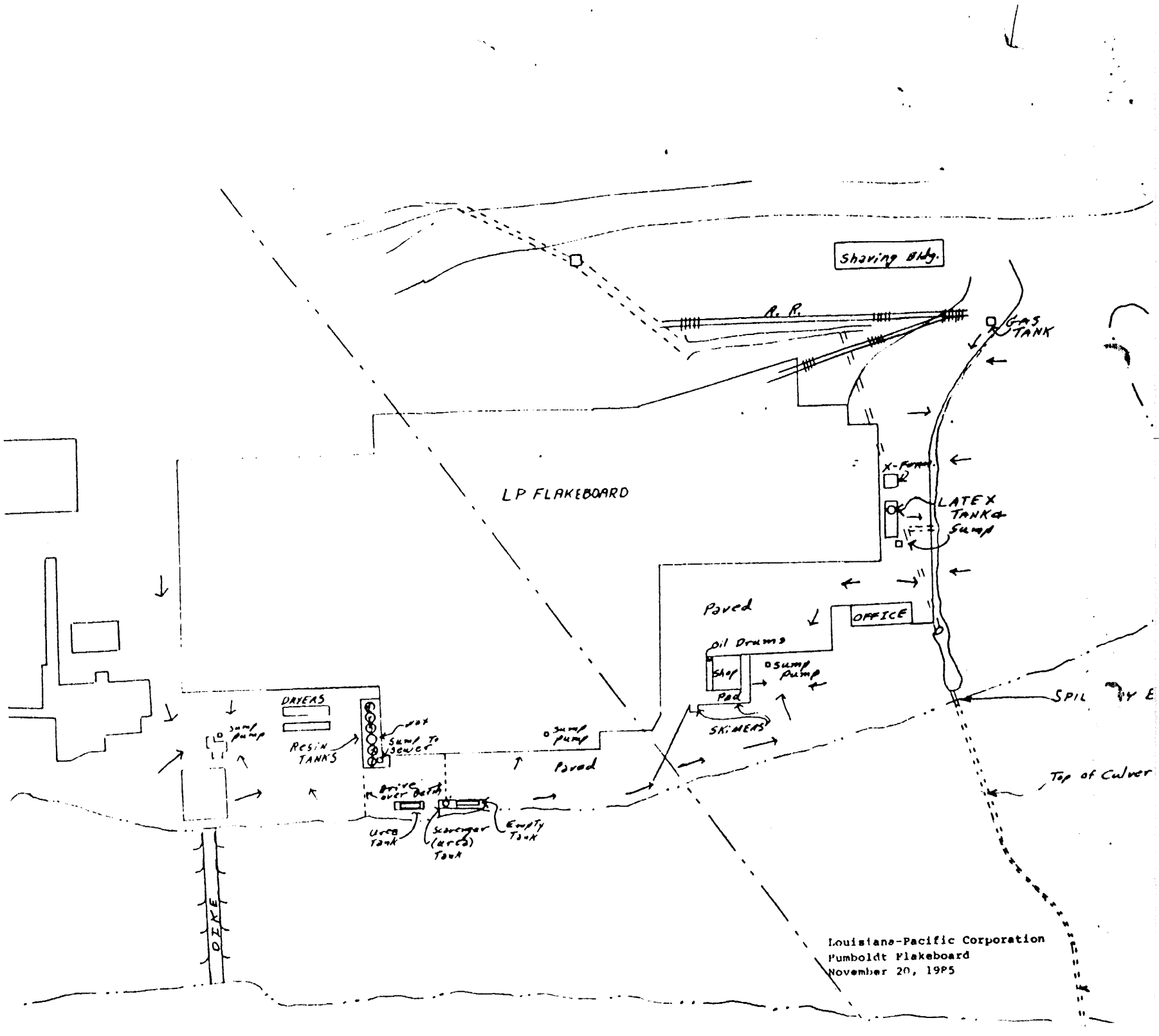
WASTE DISCHARGE REQUIREMENTS
ORDER NO. 86-2



Sampling Locations on 6/24 and 6/25/87

① = Sampling location

Figure 1


Shaving Bldg.
R. R.
GAS TANK
LP FLAKEBOARD
X-Former
LATEX TANK & Sump
Paved
OFFICE
Oil Drums
Shop
Pad
sump pump
SKIMMERS
DRYERS
Resin TANKS
sump pump
Paved
Urea Tank
Scavenger (urea) Tank
Empty Tank
DIKE
Louisiana-Pacific Corporation
Pumboldt Flakeboard
November 20, 1985

NORTH COAST LABORATORIES LTD.

5680 WEST END ROAD • ARCATA • CA 95521 • (707) 822-4649

Date: 05 February 1988

Report to: Louisiana Pacific Corp.
P.O. Box 158
Samoa, CA 95564
Attn: Kelly Stalker

Date Received: 01-07-88 **Date Sampled:** 01-07-88

CHEMICAL EXAMINATION REPORT

SAMPLE DESCRIPTION	NCL #	PARAMETER	RESULT	UNITS
Arcata Pond	88-0107-10-1	Formaldehyde	87	ug/l

Project Chemist: Analytical Laboratory

Checked by: JGC

Jesse G. Chaney, Jr.
Laboratory Director

Typed By:rmd

FEB 9 1988

NORTH COAST LABORATORIES LTD.

5680 WEST END ROAD • ARCATA • CA 95521 • (707) 822-4649

Date: 05 February 1988

Report to: Louisiana Pacific Corporation
Box 158
Samoa, CA 95564
Attn: Kelly Stalker

Sample Description: Arcata Pond

NCL #: 88-0107-9-1 **Sampled by:** Unknown

Date Received: 01-07-88 **Date Sampled:** 01-07-88

FISH BIOASSAY REPORT

Test Species: Rainbow Trout

Results: 100% Survival in 100% Sample

Survival:

	24 Hours	48 Hours	72 Hours	96 Hours
Control	100%	100%	100%	100%
100% Sample	100%	100%	100%	100%

Comments:

Project Chemist: CS

Checked By

Jesse G. Chaney, Jr.
Laboratory Director

Typed By:rmd

FEB 9 1988

NORTH COAST LABORATORIES LTD.

5680 WEST END ROAD • ARCATA • CA 95521 • (707) 822-4649

Date: 05 February 1988

Report to: Louisiana Pacific Corp.
P.O. Box 158
Samoa, CA 95564
Attn: Kelly Stalker

Date Received: 01-07-88 **Date Sampled:** 01-07-88

CHEMICAL EXAMINATION REPORT

SAMPLE DESCRIPTION	NCL #	PARAMETER	RESULTS	MDL*	UNITS
Arcata Pond	88-0107-9-1	BOD	7	5	mg/l
		NFR	3	1	mg/l
		SS	<0.1	0.1	ml/l/hr
		pH	7.5	0.1	pH units
	88-0107-9-2	Ammonia/ Nitrogen	2.2	0.1	mg/l

Comments: * Minimum Detection Limit
Note: Test for phenols is in progress, report will be sent upon completion.

Project Chemist: CS

Checked by: JGC

Jesse G. Chaney, Jr.
Laboratory Director

Typed By:rmd

FEB 9 1988

NORTH COAST LABORATORIES LTD.

5680 WEST END ROAD • ARCATA • CA 95521 • (707) 822-4649

Date: 16 December 1988

Report to: Water Quality Control Board
1440 Guerneville Road
Santa Rosa, CA 95401

Attn: Mark Harvey

Date Received: 11-29-88 **Date Sampled:** 11-29-88

CHEMICAL EXAMINATION REPORT

SAMPLE DESCRIPTION	NCL #	PARAMETER	RESULTS	UNITS
LP Weir	88-11-329-01C	Formaldehyde	157	ug/L
LP Sump DIS	88-11-329-02C	Formaldehyde	438	ug/L
LP Pond Sediment #1	88-11-329-03B	Formaldehyde	48	mg/kg
LP Pond Sediment #2	88-11-329-04B	Formaldehyde	36	mg/kg
LP Pond Sediment #3	88-11-329-05B	Formaldehyde	24	mg/kg
LP Clarifier	88-11-329-06A	Formaldehyde	6700	ug/L

Frank -
Where do these babies go? You can throw them away if you want!

Beth

FILE
LP Humboldt Flakeboard (AL)
K. M. Heiman

Laboratory Director

Typed By: ER

NORTH COAST LABORATORIES LTD.

5680 WEST END ROAD • ARCATA • CA 95521 • (707) 822-4649

4

Date: 17 February 1989

Report to: Louisiana Pacific Corp.
P.O. Box 1098 West End Road
Arcata, CA 95521

Attn: Kelly Stalker

Date Received: 02-02-89 **Date Sampled:** 02-02-89

CHEMICAL EXAMINATION REPORT

SAMPLE DESCRIPTION	NCL #	PARAMETER	RESULTS	MDL*	UNITS
210-02029-SW-Pond	89-02-027-01A	Phenols	ND	0.1	mg/L
	89-02-027-01C	Ammonia/N	3.7	0.1	mg/L
	89-02-027-01D	Formaldehyde	15	10	ug/L
	89-02-027-01E	NFR	6	1	mg/L
		SS	ND	0.1	mL/L/hr
		BOD	9	5	mg/L
		pH	6.7	0.1	pH units

Comments: * Minimum Detection Limit
ND - None Detected

Project Chemist: CS; Analytical Laboratories

QA Officer: D. N. Kinman

Paige Moan FEB 27 1989
Jesse G. Chaney, Jr.
Laboratory Director

Typed By: ER

NORTH COAST LABORATORIES LTD.
5680 WEST END ROAD • ARCATA • CA 95521 • (707) 822-4649

Date: 30 March 1989

Report to: Louisiana Pacific Corp.
P.O. Box 1098 West End Rd.
Arcata, CA 95521

Attn: Kelly Stalker

Date Received: 03-09-89 **Date Sampled:** 03-09-89

CHEMICAL EXAMINATION REPORT

SAMPLE DESCRIPTION	NCL #	PARAMETER	RESULTS	MDL	UNITS
210-03099-SW-POND	89-03-136-01B	NFR	11	1	mg/L
		SS	ND	0.1	mL/L/hr
		BOD	9	5	mg/L
		pH	7.2	0.1	pH units
	89-03-136-01C	Phenols	ND	0.1	mg/L
	89-03-136-01D	Formaldehyde	39	10	ug/L
	89-03-136-01E	Ammonia/N	7.6	0.1	mg/L

Comments: MDL - Minimum Detection Limit
ND - None Detected

Project Chemist: CS; Formaldehyde - Analytical Laboratory

QA Officer: Lynn R. Heiman

Jesse G. Chaney, Jr.
Laboratory Director

Typed By: ER

NORTH COAST LABORATORIES LTD.
5680 WEST END ROAD • ARCATA • CA 95521 • (707) 822-4649

Date: 30 March 1989

Report to: Louisiana Pacific Corp.
P.O. Box 1098 West End Rd.
Arcata, CA 95521

Attn: Kelly Stalker

Sample Description: 210-03099-SW-POND

NCL #: 89-03-136-01A

Date Received: 03-09-89 **Date Sampled:** 03-09-89

PERCENT SURVIVAL FISH BIOASSAY REPORT

Test Species: Rainbow Trout

Results: 90% Survival

Survival:	24 Hours	48 Hours	72 Hours	96 Hours
Control	100%	100%	100%	100%
Sample	100%	100%	100%	90%

Comments:
Date started: 03-10-89
fish average weight: 0.50 g
fish average length: 3.5 cm
acclimatization time: 1 day

Project Chemist: CS

QA Officer: Lynn M. Heiman

Jesse G. Chaney, Jr.
Laboratory Director

Typed By: ER

Anlab
ANALYTICAL LABORATORY
A DIVISION OF DEWANTE & STOWELL

1910 S STREET, SACRAMENTO, CALIFORNIA 95814 • 916-447-2946

February 23, 1990
Sample Date: 02/16/90
Sample Rec'd. Date: 02/19/90
Report # 125714

North Coast Laboratories, Ltd.
5680 West End Road
Arcata, CA 95521

Client Name: Louisiana Pacific

SAMPLE DESCRIPTION	ANLAB ID#	FORMALDEHYDE, mg/kg	MDL
90-02-284-1A Pond A	125714-1	1.5	0.1
90-02-284-2A Pond B	125714-2	0.70	0.1
90-02-284-3A Pond C	125714-3	0.22	0.1

Sampling occurs only when there is pond overflow. Months not included here are so because there was no discharge and thus no sampling.

Data Certified by Kimberlie J Peg

Report Approved by Kendra Tovey

Wed. March 20 8:00am

101 → 299 1st exit → Bintalli Lane Rt. onto WestEnd 1/8 mile turn South in to parking area surround back of raw materials opening on fence by RR tracks. Smell of wood

NORTH COAST LABORATORIES INC.

5680 WEST END ROAD • ARCATA • CA 95521 • (707) 822-4649

Date: 03/09/90
Work Order: 90-02-352
Invoice #: 60007212

REPORT

REPORT TO: Louisiana Pacific Corp.
P.O. Box 158 #1 LP Drive
Samoa, CA 95564

Attn: Liz Smith

WORK ID: Pond A,B,C

WORK ORDER 90-02-352

PO # 73156

INVOICE # 60007212

REPORT CERTIFIED BY

J. Hoenmans for C.S.
Laboratory Supervisor(s)

Paige Noon (for LH)
QA Officer

Jesse G. Chaney, Jr.
Laboratory Director

SAMPLE IDENTIFICATION

Fraction	Sample Description
01	Pond A
02	Pond B
03	Pond C

Comments:

Previously reported on 03/08/90.
First reported on 03/06/90.

Notes and Definitions:

Limit = Detection Limit
ND = None Detected

NORTH COAST LABORATORIES INC.
5680 WEST END ROAD • ARCATA • CA 95521 • (707) 822-4649

Date: 03/09/90
Work Order: 90-02-352
Invoice #: 60007212

REPORT

SAMPLE ID: Pond A FRAC.: 01A COLLECTED: 02/16/90 RECEIVED: 02/16/90

PARAMETER	RESULT	LIMIT	UNITS	DIL.FACTOR	EXTRACTED	RUN	METHOD
Ammonia Soil	2.0	1.0	ug/g				SM417E
Orgnc Mttr Wlkly Blck-soil	37	0.1	%				S_18_0
Phenols Soil	ND	10	ug/g	1.00			SM510AC

SAMPLE ID: Pond B FRAC.: 02A COLLECTED: 02/16/90 RECEIVED: 02/16/90

PARAMETER	RESULT	LIMIT	UNITS	DIL.FACTOR	EXTRACTED	RUN	METHOD
Ammonia Soil	28	1.0	ug/g				SM417E
Orgnc Mttr Wlkly Blck-soil	98	0.1	%				S_18_0
Phenols Soil	ND	10	ug/g	1.00			SM510AC

SAMPLE ID: Pond C FRAC.: 03A COLLECTED: 02/16/90 RECEIVED: 02/16/90

PARAMETER	RESULT	LIMIT	UNITS	DIL.FACTOR	EXTRACTED	RUN	METHOD
Ammonia Soil	3.1	1.0	ug/g				SM417E
Orgnc Mttr Wlkly Blck-soil	34	0.1	%				S_18_0
Phenols Soil	ND	10	ug/g	1.00			SM510AC

NORTH COAST LABORATORIES INC.
5680 WEST END ROAD • ARCATA • CA 95521 • (707) 822-4649

Date: 03/09/90
Work Order: 90-02-352
Invoice #: 60007212

REPORT

REPORT TO: Louisiana Pacific Corp.
P.O. Box 158 #1 LP Drive
Samoa, CA 95564

Attn: Liz Smith

WORK ID: Pond A,B,C

WORK ORDER 90-02-352

PO # 73156

INVOICE # 60007212

REPORT CERTIFIED BY

J. Harrison for C.S.
Laboratory Supervisor(s)

Gaige Noon (for LH)
QA Officer

Jesse S. Chaney, Jr.
Laboratory Director

SAMPLE IDENTIFICATION

Fraction	Sample Description
01	Pond A
02	Pond B
03	Pond C

Comments:

Previously reported on 03/08/90.
First reported on 03/06/90.

Notes and Definitions:

Limit = Detection Limit
ND = None Detected

NORTH COAST LABORATORIES INC.
5680 WEST END ROAD • ARCATA • CA 95521 • (707) 822-4649

Date: 03/09/90
Work Order: 90-02-352
Invoice #: 60007212

REPORT

SAMPLE ID: Pond A FRAC.: 01A COLLECTED: 02/16/90 RECEIVED: 02/16/90

PARAMETER	RESULT	LIMIT	UNITS	DIL.FACTOR	EXTRACTED	RUN	METHOD
Ammonia Soil	2.0	1.0	ug/g				SM417E
Orgnc Mttr Wlkly Blck-soil	37	0.1	%				S_18_0
Phenols Soil	ND	10	ug/g	1.00			SM510AC

SAMPLE ID: Pond B FRAC.: 02A COLLECTED: 02/16/90 RECEIVED: 02/16/90

PARAMETER	RESULT	LIMIT	UNITS	DIL.FACTOR	EXTRACTED	RUN	METHOD
Ammonia Soil	28	1.0	ug/g				SM417E
Orgnc Mttr Wlkly Blck-soil	98	0.1	%				S_18_0
Phenols Soil	ND	10	ug/g	1.00			SM510AC

SAMPLE ID: Pond C FRAC.: 03A COLLECTED: 02/16/90 RECEIVED: 02/16/90

PARAMETER	RESULT	LIMIT	UNITS	DIL.FACTOR	EXTRACTED	RUN	METHOD
Ammonia Soil	3.1	1.0	ug/g				SM417E
Orgnc Mttr Wlkly Blck-soil	34	0.1	%				S_18_0
Phenols Soil	ND	10	ug/g	1.00			SM510AC

Anlab
ANALYTICAL LABORATORY
A DIVISION OF DEWANTE & STOWELL

1910 S STREET, SACRAMENTO, CALIFORNIA 95814 • 916-447-2946

May 7, 1990
Sample Date: 04/11/90
Sample Rec'd Date: 04/19/90
Report #: 126874

North Coast Laboratories, Inc.
5680 West End Road
Arcata, CA 95521

Client: Louisiana Pacific

SAMPLE DESCRIPTION (Monitoring)	ANLAB ID#	TIME SAMPLED	FORMALDEHYDE, ug/L	MDL
90-04-230-1A	126874-1	1030	ND	10

ND = Not Detected

Data Certified by Kimberlie J. Poly

Report Approved by Franklin J. Hazelwood

:kad

RECEIVED
SAMOA
MAY 17 '90
ENVIRONMENTAL

Anlab
ANALYTICAL LABORATORY
A DIVISION OF DEWANTE & STONEL

1910 8 STREET, SACRAMENTO, CALIFORNIA 95814 • 916-447-2946

February 23, 1990
Sample Date: 02/16/90
Sample Rec'd. Date: 02/19/90
Report # 125714

North Coast Laboratories, Ltd.
5680 West End Road
Arcata, CA 95521

Client Name: Louisiana Pacific
Arcata Pond Cleanup

SAMPLE DESCRIPTION	ANLAB ID#	FORMALDEHYDE, mg/kg	MDL
90-02-284-1A Pond A	125714-1	1.5	0.1
90-02-284-2A Pond B	125714-2	0.70	0.1
90-02-284-3A Pond C	125714-3	0.22	0.1

Data Certified by Kimberly J Poly

Report Approved by Kendra Towey

ANALYTICAL DATA FOR FORMALDEHYDE - LOUISIANA-PACIFIC ARCATA FLAKEBOARD

Date	
1-30-84	0.21 mg/1
5-15-84	0.13 mg/1
7-27-84	0.10 mg/1
6-18-85	0.30 mg/1
8-1-85	0.11 mg/1
8-13-85	0.12 mg/1
9-17-85	0.10 mg/1

1/8/85
jb

REPORT FORM DVIOLS FOR WDID='1B81005OHUM' = LP HUMBOLDT FLAKEBOARD ___ Humboldt Co

PAGE NO. 00001
05/14/87

WDS VIOLATIONS DATA
BY FACILITY ID NUMBER AND SORTED BY DATE VIOLATION KNOWN

FACILITY ID NUMBER	TYPE CODE	VIOLATION DATE KNOWN	REPORT RECEIPT DATE	DATE VIOLATION OCCURRED	COMMENTS RELATIVE TO THE IDENTIFIED NONCOMPLIANCE
1B81005OHUM	C	860718	860529	860213	DISCHARGED 63 PPB FORMALDEHYDE IN STORMWATER. ACTION: LETTER TO DISCHARGER.
1B81005OHUM	D	860718	860529	860315	FAILED TO MONITOR FOR PHENOL. ACTION: LETTER TO DISCHARGER.
1B81005OHUM	C	870304		870304	CLARIFIER EFFLUENT CONVEYED TO POND IN STORMWATER.
1B81005OHUM	C	870304		870304	SAWDUST WASTES DISPOSED TO POND.
1B81005OHUM	D	870511	870323	870216	FAILURE TO REPORT PHENOL CONCENTRATION IN STORMWATER RUNOFF.
1B81005OHUM	E	870511	870323	870315	DISCHARGE OF 1.7 MG/L AMMONIA TO SURFACE WATERS.
1B81005OHUM	D	870511	870415	870311	FAILURE TO REPORT PHENOL CONCENTRATION IN STORMWATER RUNOFF.
1B81005OHUM	E	870511	870415	870415	DISCHARGE OF 2.3 MG/L AMMONIA DISCHARGED TO SURFACE WATER.
1B81005OHUM	E	870511	870402	870304	DISCHARGE OF 4.2 MG/L AMMONIA TO SURFACE WATER.
1B81005OHUM	E	870511	870319	870304	60% SURVIVAL RATE IN 96 HR STATIC FISH BIOASSAY-POND DISCHARGE.

REPORT FORM DVIOLS FOR WDID='1B83081OHUM' = CARLOTTA LUMBER CO. _____

PAGE NO. 00001
05/14/87

WDS VIOLATIONS DATA
BY FACILITY ID NUMBER AND SORTED BY DATE VIOLATION KNOWN

FACILITY ID NUMBER	TYPE CODE	VIOLATION DATE KNOWN	REPORT RECEIPT DATE	DATE VIOLATION OCCURRED	COMMENTS RELATIVE TO THE IDENTIFIED NONCOMPLIANCE
1B83081OHUM	D	870116	870107	870115	RESULTS OF STORMWATER SAMPLE NOT SUBMITTED.
1B83081OHUM	C	870318	870223	861205	5 PPB PCP AND 2 PPB TCP CONVEYED IN STORMWATER.
1B83081OHUM	C	870318	870223	870202	5 PPB PCP AND 2 PPB TCP CONVEYED IN STORMWATER.
1B83081OHUM	D	870511	870403	870415	FAILURE TO SAMPLE STORMWATER FOR PCP/TCP.

Parameter	MDL[a]	Results		Units
SAMPLE DESCRIPTION: LP PUMP DIS 04-29-88 0910				
LAB NO.: (-9118)				
			filtered	
Ammonia, as N	0.05	16		mg/L[b]
Formaldehyde	1.0	39	5.2	mg/L
Phenols (colorimetric)	0.05	0.14		mg/L
SAMPLE DESCRIPTION: LP TANK DIS 04-29-88 0830				
LAB NO.: (-9119)				
Ammonia, as N	0.05	6.5		mg/L
Formaldehyde	1.0	63	7.3	mg/L
Phenols (colorimetric)	0.05	0.17		mg/L
SAMPLE DESCRIPTION: LP CULVERT D 04-29-88 0930				
LAB NO.: (-9120)				
Formaldehyde	1.0	1.2		mg/L

[a]MDL--Method detection limit.
[b]mg/L--Data are expressed in units of milligrams analyte per liter sample.

NET NATIONAL ENVIRONMENTAL TESTING, INC.

NET Pacific, Inc.
435 Tesconi Circle
Santa Rosa, CA 95401
Tel: (707) 526-7200
Fax: (707) 526-9623

Formerly: ANATEC Labs, Inc.

June 8, '88

Mark Harvey
CRWQCB-NCR
1440 Guerneville Road
Santa Rosa, Ca., 95401

06-08-88
NET Pacific Log No: 3014 (1-3)
Series No: 12.16/127
Client Ref: contract #7-013-110-0

Subject: Analytical Results for Three Water Samples Received 04-29-88.

Dear Mr. Harvey:

Analysis of the samples referenced above has been completed. Results are presented following this page.

Please feel welcome to contact us should you have questions regarding procedures or results.

Submitted by:

Sue J. Long
Project Chemist

Approved by:

Jules Skamarack
Project Manager

/sm

Anlab
ANALYTICAL LABORATORY
A DIVISION OF DEWANTE & STOWELL

1914 S STREET, SACRAMENTO, CALIFORNIA 95814 • 916-447-2946

December 13, 1988
Sample Date: 11/29/88
Sample Rec'd. Date: 12/01/88
Report #119021

North Coast Laboratories, Ltd.
5680 West End Road
Arcata, CA 95521

Attn: Rita Diamanti

Project: WQCB

SAMPLE DESCRIPTION	ANLAB ID#	FORMALDEHYDE
8811329-1C LP WEIR	119021-1	157 ug/l
8811329-2C LP SUMP DIS	119021-2	438 ug/l
8811329-3B LP Pond Sediment #1	119021-3	48 mg/kg
8811329-4B LP Pond Sediment #2	119021-4	36 mg/kg
8811329-5B LP Pond Sediment #3	119021-5	24 mg/kg
8811329-6A LP Clarifier	119021-6	6700 ug/l

Data Certified by Tom King

Report Approved by Franklin J. Haywood

Anlab
ANALYTICAL LABORATORY
A DIVISION OF DEWANTE & STOWELL

1914 S STREET, SACRAMENTO, CALIFORNIA 95814 • 916-447-2946

May 2, 1989
Sample Date: 04/13/89
Date Sample Rec'd: 04/18/89
Report #120659

North Coast Laboratories, Ltd.
5680 West End Road
Arcata, CA 95521

Attn: Rita M. Diamanti

#8904186-1E

SAMPLE DESCRIPTION	ANLAB ID#	FORMALDEHYDE, ug/l	MDL
210-04139-SW-Pond	120659-1	76	10

RECEIVED MAY 05 1989

ORIGINAL
INVOICE
MAY 22 1989
LOUISIANA-PACIFIC
COASTAL DIVISION
Samoa, California

Data Certified by Tom Kurb

Report Approved by Franklin J. Hayward

:slw

JISIANA-PACIFIC HUMBOLDT FLAKEBOARD HISTORICAL MONITORING DATA

SAMPLE DATE	DATE RPT. RECEIVED	FLOW (MGD)	BOD (mg/l)	NFR (mg/l)	SS (ml/l/hr)	pH	BIOASSAY (%) SURV	AMMONIA (mg/l)	FORMALDEHYDE (ug/L)	PHENOL (mg/l)	COMMENTS
12-Jan-89	17-Feb-89	0.26	12	17	<0.1	6.4	90%	2.5	<10	<0.1	
02-Feb-89	16-Mar-89	0.07	9	6	ND	6.7	100%	3.7	15	<0.1	
09-Mar-89	09-Apr-89	0.14	9	11	<0.1	7.2	90%	7.6	39	<0.1	
12-Apr-89	24-May-89	0.06	8	6	<0.1	6.8	90%	9	76	<0.1	
09-May-89	16-Jun-89	<0.01	17	5	<0.1	6.9	VNR	9.2	20	<0.1	

VNR= Required under permit but not reported
NR = Analysis not required
* = Discharge in excess of receiving water standards
PR = Properly reported
LNA= Laboratory results not available to discharger

21-Dec-88

LOUISIANA-PACIFIC HUMBOLDT FLAKEBOARD HISTORICAL MONITORING DATA

SAMPLE DATE	DATE RPT. RECEIVED	FLOW (MGD)	BOD (mg/l)	NFR (mg/l)	SS (ml/l/hr)	pH	BIOASSAY (%) SURV	AMMONIA (mg/l)	FORMALDEHYDE (mg/l)	PHENOL (mg/l)	COMMENTS
30-Nov-81		0.05	11	5	<1	7.0	100%	0.72	<0.5		
16-Dec-81		0.32	3	4	<1	6.2	100%	1.00	<0.1		
11-Jan-82		0.05	5	5	<0.1	6.3	100%	0.52	<0.1		
24-Feb-82		0.22	5	6	<0.1	6.3	100%	0.32	<0.1		
24-Mar-82		0.22	5	18	<0.1	7.2	100%	0.44	<0.1		
02-Apr-82		0.22	3	1	<0.1	6.9	90%	<0.1	<0.1		
27-Dec-82		trace	<5	5	<0.1	6.8		0.20	0.18		
28-Feb-83		0.22	10	21	<0.1	5.8	90%	0.20	0.20		
08-Mar-83		0.22	54	[illegible]	[illegible]	6.8	100%	0.40	0.24		
21-Apr-83		0.11	5	12	<0.1	[illegible]	90%	0.29	0.23		
01-May-83		0.11	[illegible]	2	[illegible]	[illegible]	100%	0.22	[illegible]		
24-Jun-83		trace	<5	-	[illegible]	[illegible]	90%	[illegible]	[illegible]		
10-Jan-84		0.06	<5	[illegible]	<0.1	[illegible]	100%	0.57	0.16		
23-Jan-84		0.16	[illegible]	8	[illegible]	[illegible]	80%	4.10	[illegible]		
01-May-84		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		
27-Jul-84		<0.153	[illegible]	[illegible]	[illegible]	[illegible]	100%	[illegible]	[illegible]		
27-Jun-85		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	100%	[illegible]	[illegible]		
01-Jul-85		<0.153		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		
19-Aug-85		trace	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		
03-Oct-85		trace	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		
13-Feb-86		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	100%	[illegible]	[illegible]		
16-Jan-87		[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		
04-[illegible]		[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	<0.1	NUMANUB
11-Mar-87		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		
08-Apr-87		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		
04-May-87		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		
15-[illegible]		[illegible]									Discharge, no samples
14-[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	<0.1	
07-[illegible]	16-Feb-88	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	<0.1	Phenol result received 3/.
03-Feb-88	14-Mar-88	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	<0.1	
	15-May-88	[illegible]									
	15-Jun-88	[illegible]									
JUNE		[illegible]									
JUL		[illegible]									
AUG		[illegible]									
SEPT		[illegible]									
OCT	16-Nov-88	[illegible]									
NOV	19-Dec-88	[illegible]	VNR	VNR	VNR	VNR	VNR	VNR	VNR	VNR	Discharge last 3 days of m
NOV	29-Nov-88	0.19	9	4	ND	6.7		4.60	0.16	ND	These samples collected by

VNR= Required under permit but not reported
NR = Analysis not required
\# = Discharge in excess of receiving water standards
PR = Properly reported
LNA= Laboratory results not available to discharger

Compare results to LP self monitoring

WATER QUALITY CONTROL BOARD REGION 1
File LP Humboldt Flaska
MAY 8 '86

ANATEC LABORATORIES INC.

435 Tesconi Circle • Santa Rosa, California 95401 • 707-526-7200

☐ BK ☐ RC
☐ CJ ☐
☐ FR ☐
☐ RT ☐
☐ JH ☐
☐ GG ☐
☐ JG ☐ REPLY
☐ ALL STAFF ☐ FILE

Cathy Goodwin
California Regional Water Quality
Control Board - North Coast Region
1000 Coddingtown Center
Santa Rosa, CA 95401

April 30, 1986
ANATEC Log No: ~~7802~~ (1-4)
Series No: 012613101
Client Ref: 5-030-110-0

Subject: Transmittal of Results for Four Aqueous Samples Received on April 3, 1986

TRANSMITTAL OF RESULTS

Parameter and Units	Descriptor, Lab No. & Results: LPHF Pond (7802-1)	LPHF Pond 2 (7802-2)	Up-stream Culvert (7802-3)	Down-stream Culvert (7802-4)
Biochemical Oxygen Demand (mg/L)	13	--	--	--
Residue:				
Total Suspended (mg/L)	10	--	--	--
Settleable (mL/L/hr)	<0.2	--	--	--
96-hr Percent Survival Bioassay[1]	100%	--	--	--
Formaldehyde[2] (mg/L)	<0.025	<0.025	<0.025	<0.025

[1]See attached report for details pertaining to the 96-hr percent survival bioassay.
[2]Analysis performed by Anlab, Sacramento, California.

Submitted by:

Jules Skamarack
Project Chemist

Approved by:

Stephen F. Nackord
Program Manager

"SMALL QUANTITY GENERATOR

Please print or type with ELITE type (12 characters/inch) in the unshaded areas only.

Form Approved OMB No. 2000-0098
FSA No. 0246-EPA-OT Expiration Date 12/31/86

EPA NOTIFICATION OF HAZARDOUS WASTE ACTIVITY

U.S. ENVIRONMENTAL PROTECTION AGENCY

INSTALLATION'S EPA I.D. NO.

I. NAME OF INSTALLATION

II. INSTALLATION MAILING ADDRESS

III. LOCATION OF INSTALLATION

PLEASE PLACE LABEL IN THIS SPACE

INSTRUCTIONS: If you received a preprinted label, affix it in the space at left. If any of the information on the label is incorrect, draw a line through it and supply the correct information in the appropriate section below. If the label is complete and correct, leave items I, II, and III below blank. If you did not receive a preprinted label, complete all items. "Installation" means a single site where hazardous waste is generated, treated, stored and/or disposed of, or a transporter's principal place of business. Please refer to the INSTRUCTIONS FOR FILING NOTIFICATION before completing this form. The information requested herein is required by law (Section 3010 of the Resource Conservation and Recovery Act).

DETACH

FOR OFFICIAL USE ONLY

COMMENTS

C

INSTALLATION'S EPA I.D. NUMBER: F C A D 9 8 0 6 7 3 5 7 8 (FOR EPA USE) 2 1

APPROVED: A

DATE RECEIVED (Yr., Mo., & Day): 8 5 0 9 2 0

I. NAME OF INSTALLATION

L O U I S I A N A - P A C I F I C C O R P O R A T I O N

II. INSTALLATION MAILING ADDRESS

STREET OR P.O. BOX

3 P O B O X 1 5 8

CITY OR TOWN | ST. | ZIP CODE

4 S A M O A | C A | 9 5 5 6 4

III. LOCATION OF INSTALLATION

STREET OR ROUTE NUMBER

5 A R L I N G T O N W A Y O F F H W Y 2 9 9

CITY OR TOWN | ST. | ZIP CODE

6 A R C A T A | C A | 9 5 5 2 1

HUMBOLDT
023

IV. INSTALLATION CONTACT

NAME AND TITLE (last, first, & job title) | PHONE NO. (area code & no.)

7 S T A L K E R A K E L L Y C O R P E N V I R O N | 7 0 7 | 4 4 3 | 7 5 1 1

V. OWNERSHIP

DETACH

A. NAME OF INSTALLATION'S LEGAL OWNER

8 L O U I S I A N A - P A C I F I C C O R P O R A T I O N

B. TYPE OF OWNERSHIP (enter the appropriate letter into box)

F = FEDERAL
M = NON-FEDERAL

2 M

VI. TYPE OF HAZARDOUS WASTE ACTIVITY (enter "X" in the appropriate box(es))

- A. GENERATION
- B. TRANSPORTATION (complete item VII)
- C. TREAT/STORE/DISPOSE
- D. UNDERGROUND INJECTION

VII. MODE OF TRANSPORTATION (transporters only – enter "X" in the appropriate box(es))

- A. AIR
- B. RAIL
- C. HIGHWAY
- D. WATER
- E. OTHER (specify):

VIII. FIRST OR SUBSEQUENT NOTIFICATION

Mark "X" in the appropriate box to indicate whether this is your installation's first notification of hazardous waste activity or a subsequent notification. If this is not your first notification, enter your installation's EPA I.D. Number in the space provided below.

- [X] A. FIRST NOTIFICATION
- [ ] B. SUBSEQUENT NOTIFICATION (complete item C)

C. INSTALLATION'S EPA I.D. NO.

IX. DESCRIPTION OF HAZARDOUS WASTES

Please go to the reverse of this form and provide the requested information.

EPA Form 8700-12 (6-85)

CONTINUE ON REVERSE

I.D. – FOR OFFICIAL USE ONLY

W

IX. DESCRIPTION OF HAZARDOUS WASTES *(continued from front)*

A. HAZARDOUS WASTES FROM NON-SPECIFIC SOURCES. Enter the four-digit number from 40 CFR Part 261.31 for each listed hazardous waste from non-specific sources your installation handles. Use additional sheets if necessary.

1	2	3	4	5	6
7	8	9	10	11	12

DETACH

B. HAZARDOUS WASTES FROM SPECIFIC SOURCES. Enter the four-digit number from 40 CFR Part 261.32 for each listed hazardous waste from specific industries sources your installation handles. Use additional sheets if necessary.

13	14	15	16	17	18
19	20	21	22	23	24
25	26	27	28	29	30

C. COMMERCIAL CHEMICAL PRODUCT HAZARDOUS WASTES. Enter the four-digit number from 40 CFR Part 261.33 for each chemical substance your installation handles which may be a hazardous waste. Use additional sheets if necessary.

31	32	33	34	35	36
37	38	39	40	41	42
43	44	45	46	47	48

D. LISTED HAZARDOUS WASTES. Enter the four-digit number from 40 CFR Part 261.34 for each listed hazardous waste from hospital, veterinary, pharmacy, and medical laboratories your installation handles. Use additional sheets if necessary.

49	50	51	52	53	54

E. CHARACTERISTICS OF NON-LISTED HAZARDOUS WASTES. Mark "X" in the boxes corresponding to the characteristics of non-listed hazardous wastes your installation handles. *(See 40 CFR Parts 261.21 – 261.24.)*

55. IGNITABLE (D001) ☐ 56. CORROSIVE (D002) ☐ 57. REACTIVE (D003) ☒ 58. TOXIC (D000) **

DETACH

X. CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

SIGNATURE	NAME & OFFICIAL TITLE *(type or print)*	DATE SIGNED
a. Kelly Stalker	A. Kelly Stalker Assistant Corporate Environmentalist	9/23/85

EPA Form 8700-12 (6-85) REVERSE

**PCB's and material containing PCB's - California Code # 261 - (D000 - Toxic)
Soil contaminated with petroleum products - California Code # 611 - (D001 - Ignitable)

GREEN

TSC 15-(82) 11,12

Mr. A. Kelly Stalker
Louisiana Pacific Corporation
P.O. Box 158
Samoa, CA 95564

Dear Mr. Stalker:

A PCB investigation was made at Louisiana Pacific Corporation, Samoa, and Arcata facilities on March 12, 1982. During the course of this investigation, information was gathered by EPA in accordance with Section 11 of the Toxic Substances Control Act. A copy of the investigation report is enclosed for your information.

The deficiencies or violations that may be noted in the report are not necessarily inclusive and any omission of other deficiencies or violations shall not be binding upon the Agency.

Comments may be provided by you concerning any aspect of the report. In your response please refer to report number TSC 15-(82) 11,12.

EPA routinely provides copies of investigation reports to State agencies. Such releases will be handled according to the rules governing business confidentiality claims contained in the Code of Federal Regulations (40 CFR, Part 2).

If you have questions concerning this report, please contact Sandy Avol, Field Investigator, Field Inspections Section at (415) 974-7447.

Sincerely yours,

Kathleen G. Shimmin, Chief
Compliance & Response Branch
Toxics & Waste Management Division

Enclosures

bc: T-3-1
T-3-2

TOX-10
T-3-2:Avol:janice:TOX 10:7447:6/28/82
027A

DOCUMENT SOURCE

STATE OF CALIFORNIA—THE RESOURCES AGENCY

GEORGE DEUKMEJIAN, *Governor*

DEPARTMENT OF WATER RESOURCES
NORTHERN DISTRICT
2440 MAIN STREET
P.O. BOX 607
RED BLUFF 96080
(916) 527-6530

DOHS

RWQCB

DWR OTHER

DATE 6/29/90

Enclosed is material

☐ FOR YOUR INFORMATION

☒ AS YOU REQUESTED

Helena - Here are the well & water level data we have in T6N/R1E-16

Glen Pearson

DOCUMENT SOURCE
DOHS
RWQCB
OTHER
DATE 6/22/90

TWN	RNG	B	M	OWNER	LOGNUM	D	W	USE	DM	DY	DCODE	YR	BK			
06N	01E	05	H	SWAIN	49517		N	DOM	10-	71	503	82	0	0	0	613
06N	01E	06	H	BROWN	56147		N	DOM	12-	59	543	82	0	0	0	614
06N	01E	06	H	COOK	49531		N	DOM	6-	71	503	82	0	0	0	615
06N	01E	06	H	MORNINGSTAR	38795		N	DOM	3-	59	543	82	0	0	0	616
06N	01E	06	H	MORNINGSTAR	56127		N	DOM	8-	59	543	82	0	0	0	617
06N	01E	06	H	PAGE	79963		N	DOM	1-	60	462	82	0	0	0	618
06N	01E	06	H	PAIGE	70501		N	DOM	7-	73	462	82	0	0	0	619
06N	01E	06	H	SORENSEN	3682		N	DOM	8-	67	493	82	0	0	0	620
06N	01E	06	H	ULMER	38799		N	DOM	5-	59	543	82	0	0	0	621
06N	01E	07	H	COLLENBERG	49582		N	IRR	12-	69	493	82	0	0	0	622
06N	01E	07	H	GRANITE CONST.CO.	76740		N	DOM	8-	63	517	82	0	0	0	623
06N	01E	07	H	KADLE	80680		N	DOM	9-	64	462	82	0	0	0	624
06N	01E	07	H	KJER	10		N	UNK	0-	47	424	82	0	0	0	625
06N	01E	08	H	BARBER	22874		N	DOM	2-	57	510	85	0	0	0	626
06N	01E	08	H	BELLA VISTA MARKET	38781		N	DES	10-	58	543	82	0	0	0	627
06N	01E	08	H	BELLA VISTA MARKET	38782		N	IND	10-	58	543	82	0	0	0	628
06N	01E	08	H	KADLE	38766		N	DOM	9-	58	543	82	0	0	0	629
06N	01E	08	H	MORNINGSTAR	56103		N	TES	5-	59	543	82	0	0	0	630
06N	01E	08	H	MORNINGSTAR	56104		N	TES	5-	59	543	82	0	0	0	631
06N	01E	08	H	MORNINGSTAR	56105		N	DOM	5-	59	543	82	0	0	0	632
06N	01E	08	H	MORNINGSTAR	56118		N	DOM	7-	59	543	82	0	0	0	633
06N	01E	08	H	WYMORE	49572		N	IRR	5-	69	493	82	0	0	0	634
06N	01E	09	H	ALLEN	38796		N	TES	4-	59	543	82	0	0	0	635
06N	01E	09	H	ALLEN	56480		N	DOM	3-	60	503	82	0	0	0	636
06N	01E	09	H	BATTILACCHI	23167		N	DOM	1-	58	541	85	0	0	0	637
06N	01E	09	H	DRAUT	4549		N	DOM	5-	67	503	82	0	0	0	638
06N	01E	09	H	FLEMMING	38761		N	DRY	8-	58	543	82	0	0	0	639
06N	01E	09	H	MATSON	42878		N	DOM	7-	68	503	82	0	0	0	640
06N	01E	09	H	MORNINGSTAR	38789		N	TES	1-	59	543	82	0	0	0	641
06N	01E	09	H	PICKELT	80705		N	DOM	10-	63	462	82	0	0	0	642
06N	01E	09	H	WAGNER	42870		N	DOM	3-	68	503	82	0	0	0	643
06N	01E	11	H	COLE	4278		N	DOM	1-	71	499	83	0	0	0	644
06N	01E	12	H	LYMAN	96592		N	DOM	11-	61	517	61	0	0	0	645
06N	01E	12	H	STOLPE	42875		N	DOM	6-	68	503	61	0	0	0	646
06N	01E	12	H	TIERNEY	45980		N	DOM	11-	69	493	61	0	0	0	647
06N	01E	13	H	BLUE LAKE FOREST PRO	277626		N	TES	4-	88	1601	88	0	0	0	648
06N	01E	13	H	BLUE LAKE FOREST PRO	277627		N	TES	4-	88	1601	88	0	0	0	649
06N	01E	13	H	BLUE LAKE FOREST PRO	277628		N	TES	4-	88	1601	88	0	0	0	650
06N	01E	13	H	BLUE LAKE FOREST PRO	277629		N	TES	4-	88	1601	88	0	0	0	651
06N	01E	13	H	BLUE LAKE FOREST PRO	277664		N	TES	4-	88	1601	88	0	0	0	652
06N	01E	13	H	BLUE LAKE FOREST PRO	277665		N	TES	4-	88	1601	88	0	0	0	653
06N	01E	13	H	CANNON	11		N	UNK	9-	49	541	61	0	0	0	654
06N	01E	13	H	COUCH	42871		N	DOM	4-	68	503	61	0	0	0	655
06N	01E	13	H	HONES LAWRENCE	76762		N	DOM	2-	64	517	61	0	0	0	656
06N	01E	13	H	MCGAUGHEY	49586		N	DOM	8-	70	493	61	0	0	0	657
06N	01E	13	H	PARKER	49573	1	N	DOM	6-	69	493	61	0	0	0	658
06N	01E	13	H	PARKER	93401	1	N	DOM	12-	74	503	61	0	0	0	659
06N	01E	13	H	PARKER TRAILER PARK	65820	1	N	DOM	12-	72	503	61	0	0	0	660
06N	01E	14	H	GARBON	62553	1	N	DOM	8-	71	493	61	0	0	0	661
06N	01E	14	H	KILMER	76698		N	DOM	9-	63	518	61	0	0	0	662
06N	01E	14	H	KILMER	76699		N	DOM	9-	64	518	61	0	0	0	663
06N	01E	14	H	LADY	4277	1	N	DOM	1-	70	499	83	0	0	0	664
06N	01E	14	H	LIPSCOMB	49576	1	N	DOM	8-	69	493	83	0	0	0	665
06N	01E	15	H	ASHEY	115168	1	N	DOM	10-	78	1232	83	0	0	0	666
06N	01E	15	H	LUCCHESI	76784	1	N	DOM	7-	64	493	83	0	0	0	667
06N	01E	15	H	SALZMAN	280071	1	N	DOM	8-	89	1429	89	504	171	8	668
06N	01E	15	H	TAYLOR	49568		N	DOM	11-	68	493	83	0	0	0	669
06N	01E	15	H	WINZLER & KELLY	80686		N	OTH	7-	64	462	83	0	0	0	670
06N	01E	16	H	HUNT	49581		N	IND	12-	69	493	83	0	0	0	671
06N	01E	16	H	MOXON	3678		N	IRR	7-	67	493	83	0	0	0	672
06N	01E	16	H	ROCHAITZ	42896	1	N	DOM	11-	69	503	83	0	0	0	673
06N	01E	16	H	SHALLOW	73849		N	DOM	6-	76	518	83	0	0	0	674
06N	01E	17	H	KIRSCH	91868	1	N	DOM	9-	85	1429	85	0	0	0	675
06N	01E	17	H	PARTON	12		N	UNK	9-	52	424	85	0	0	0	676
06N	01E	18	H	LANCASTER	13		N	UNK	0-	48	424	85	0	0	0	677
06N	01E	18	H	LARSEN	80130	1	N	DOM	8-	64	503	85	0	0	0	678
06N	01E	19	H	HANSEN	14	1	N	UNK	0-	50	541	85	0	0	0	679
06N	01E	19	H	PFEIFFER	3691		N	IRR	6-	68	493	85	0	0	0	680

SPRING BASIN # MAD RIVER VALLEY
1990 1-008.00

AGENCY	WELL #	RP ELEV	GS ELEV	DATE M	D	Y	NM CODE	QM CODE	TAPE AT RP	TAPE AT WS	RP-WS	GS-WS	WS ELEV	COMMENTS
5050	06N01E07M01H	13.0	11.0	3	15	90			3.0	2.0	1.0	-1.0	12.0	
5050	06N01E13M01H	125.5	125.0	3	15	90			30.0	8.5	21.5	21.0	104.0	
5050	06N01E17D01H	21.5	21.0	3	15	90			10.0	1.4	8.6	8.1	12.9	
5050	06N01E19Q01H	21.0	19.0	3	15	90			15.0	2.5	12.5	10.5	8.5	

State No. 06N/1E-16E

WELL DATA

BRANCH NORTHERN

Owner Mrs. CARLSON EUREKA SAND & GRAVEL | State No. 06N01E16E03 H
Address | Other No.
Tenant
Address

Type of Well: Hydrograph [✓] Key [ ] Index [ ] Semi-annual
Location: County Humboldt Basin MAD RIVER VALLEY No. 1-8.00
U.S.G.S. Quad. Quad. No.
SW ¼ NW ¼ Section 16, Twp. 06N, Rge. 01E MD SB Base & Meridian
Description

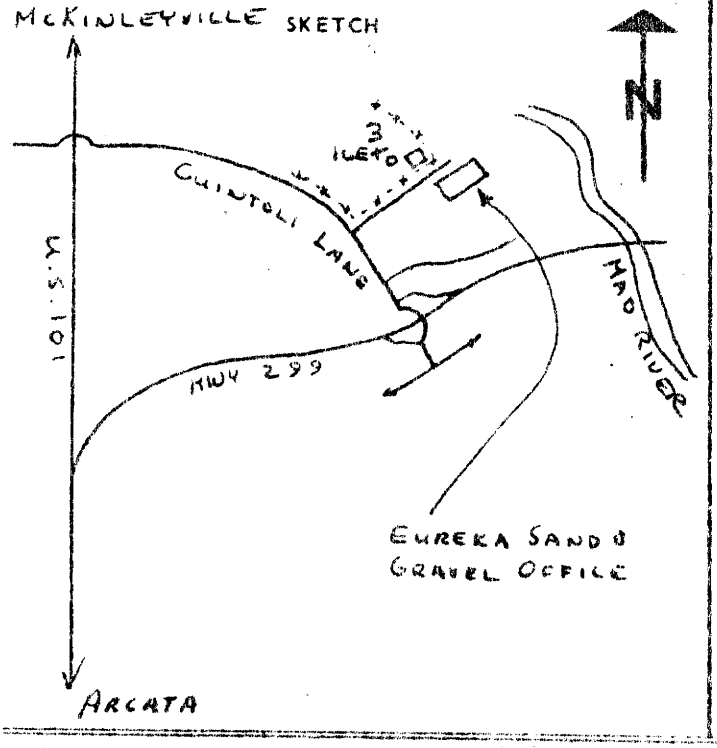
Reference Point description

which is 3 ft. above (below) land surface. Ground Elevation 20 ft.
Reference Point Elev. 23 ft. Determined from TOPO
Well: Use COMMUNITY COMMERCIAL condition Depth 127 ft.
Casing, size 10 in., perforations

Measurements By: DWR [ ] USGS [✓] USBR [ ] County [ ] Irr. Dist. [ ] Water Dist. [ ] Cons. Dist. [ ]
Chief Aquifer: Name Depth to Top Aq. Depth to Bot. Aq.
Type of Material Perm. Rating Thickness
Gravel Packed? Yes [ ] No [ ] Depth to Top Gr. Depth to Bot. Gr.
Supp. Aquifer Depth to Top Aq. Depth to Bot. Aq.
Driller TONY PIALERSI - ARCATA PUMP & EQUIP. CO.
Date drilled 6-59 Log, filed open (1) confidential (2)
Equipment: Pump, type SUBMERSIBLE make
Serial No. Size of discharge pipe in.
Power, Kind ELEC. Make
H. P. 5 Motor Serial No.
Elec. Meter No. Transformer No.
Yield G.P.M. Pumping level ft.

Water Analyses Min. (1) San. (2) H.M. (3)
Water Levels available Yes (1) No
Period of Record Begin End
Collecting Agency
Prod. Rec. (1) Pump Test (2) Yield (3)

McKINLEYVILLE SKETCH



REMARKS

Recorded by
Date

9-5D Exp. (GW)
April 1966

Well No. 6N/1E - - 16E3

WELL SCHEDULE

U. S. DEPT. OF THE INTERIOR — GEOLOGICAL SURVEY — WATER RESOURCES DIVISION

MASTER CARD

Record by: D.P.J. - PLD Source of data: Date: 1/11/72 Map: EUREKA 7.5'

State: CALIF 06 County (or town): HUMBOLDT 12

Latitude: 40 04 26 11 N Longitude: 124 04 33 Sequential number:

Lat-long accuracy: T 6 N R 1 E Sec 16 NE

Local well number: 006N001E16E03H Other number:

Local use: Owner or name: Eureka Sand and Gravel

Owner or name: MRS CARLSON Address:

Ownership: County, Fed Gov't, City, Corp or Co, Private, State Agency, Water Dist — P

Use of water: Air cond, Bottling, (C) Comm, Dewater, Power, Fire, Dom, Irr, Med, Ind, P S, Rec, Stock, Instit, Unused, Repressure, Recharge, Desal-P S, Desal-other, Other — C

Use of well: Anode, Drain, Seismic, Heat Res, Obs, Oil-gas, Recharge, Test, Unused, (W) Withdraw, Waste, Destroyed — W

DATA AVAILABLE: Well data Freq. W/L meas.: Field aquifer char.

Hyd. lab. data:

Qual. water data; type:

Freq. sampling: Pumpage inventory: yes no, period:

Aperture cards:

Log data:

WELL-DESCRIPTION CARD

SAME AS ON MASTER CARD Depth well: 127 ft 127 Meas. rept: REPT accuracy: A

Depth cased (first perf.): 115 ft Casing type: Iron Diam. 10 in

Finish: porous concrete, gravel w. (perf.), gravel w. (screen), horiz. gallery, open end, (P) perf, screen, sd. pt., shored, open hole, other — P

Method: air rot., bored, (C) cable, dug, hyd rot., jetted, air percussion, reverse rotary, trenching, driven, drive wash, other — C

Drilled: 6-57 657 Pump intake setting: 110' ft

Driller: Tony [illegible], Arcata Pump & Equip Co address

Lift (type): air, bucket, cent, jet, multiple (cent.), multiple (turb.), none, piston, rot, (S) submerg, turb, other — S Deep Shallow

Power (type): diesel, elec, gas, gasoline, hand, gas, wind; H.P. 5 Trans. or meter no.

Descrip. MP: Hole in top of plate 2 ft above/below LSD, Alt. MP

Alt. LSD: 20 Accuracy: TOPO A

Water level: 29.65 ft above/below MP; ft above/below LSD Accuracy: MEAS M

Date meas.: 1 72 Yield: gpm Method determined

Drawdown: ft Accuracy: Pumping period: hrs

QUALITY OF WATER DATA: Iron ppm Sulfate Chloride ppm Hard. ppm

Sp. Conduct K x 10[6] Temp. °F Date sampled

Taste, color, etc.

Well No. 6N/1E - - 16E3 (3)

Latitude-longitude: 40 57.26 @ 124 04.33

HYDROGEOLOGIC CARD

SAME AS ON MASTER CARD Physiographic Province: COAST RANGES 24 Section:

Drainage Basin: E 12 Subbasin: X

Topo of well site: depression, stream channel, dunes, flat, hilltop, sink, swamp, offshore, pediment, hillside, terrace, undulating, valley flat — F

MAJOR AQUIFER: QUAT system, HOLOCENE series QR ALLUVIUM aquifer, formation, group QA

Lithology: 7C Origin: Z Aquifer Thickness: ft

Length of well open to: ft Depth to top of: ft

MINOR AQUIFER: system, series, aquifer, formation, group

Lithology: Origin: Aquifer Thickness: ft

Length of well open to: ft Depth to top of: ft

Intervals Screened:

Depth to consolidated rock: ft Source of data:

Depth to basement: ft Source of data:

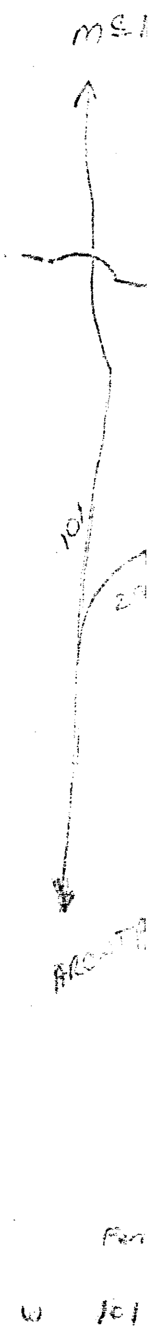
Surficial material: Infiltration characteristics:

Coefficient Trans: gpd/ft Coefficient Storage:

Coefficient Perm: gpd/ft^2; Spec cap: gpm/ft; Number of geologic cards:

16

T6N R1E



City of ARCATA

Lia Sullivan
Associate Planner

736 F Street, Arcata, California 95521 (707)822-5955

State of the City Report

1990

Prepared for the Department of Community Development by

Humboldt State University Interns

Thomas John Genolio, *Geography*

Paul E. Hardwick, *Natural Resource Planning*

Terry Wren, *Political Science*

1980 CENSUS NEIGHBORHOOD STATISTICS PROGRAM

Many neighborhoods exist within Arcata's boundaries. The 1980 Census **Neighborhood Statistics Program** produced demographic and economic information for each neighborhood in Arcata. It must be noted that the following information is based on a total population of 12,340 people in Arcata and a total of 4,772 housing units as determined by the 1980 Census. FIGURE 15: NEIGHBORHOODS; 1980 CENSUS NEIGHBORHOOD STATISTICS PROGRAM shows the neighborhoods, which are further described below.

Apartment

The "Apartment" neighborhood is Arcata's most southern neighborhood, located on the east side of Highway 101. The majority of the area is in agricultural production. The northern end of the neighborhood contains several large multi-family apartments and student housing complexes.

The Apartment neighborhood is relatively close to Humboldt State University, with easy access to the Downtown area and Highway 101. The neighborhood contains 8.6 percent of Arcata's total population and 12.3 percent of the City's total housing units. Renters make up 94.1 percent of the Apartment neighborhood's residents; only 5.9 percent of the neighborhood's residents own their homes.

Arcata Heights

Arcata Heights is adjacent to Downtown Arcata, on the west side of Highway 101 directly across from Humboldt State University. There are many small businesses in the Arcata Heights neighborhood.

Arcata Heights contains 13.1 percent of Arcata's housing units. Within Arcata Heights 22.5 percent of the housing units are owner occupied and 77.5 percent are renter-occupied. Eleven percent of the City's total population lives in Arcata Heights.

Bayview and University

The neighborhoods of Bayview and "University" have been combined by the Census Neighborhood Statistic Program. These neighborhoods are located on the east side of Highway 101 just north of Fickle Hill Road.

Bayview and University are primarily residential neighborhoods, containing 11.9 percent of Arcata's population. These neighborhoods contain 8.6 percent of Arcata's housing; 39.6 percent of the housing units are owner-occupied and 60.4 percent are renter-occupied.

Arcata's housing stock. The majority of the units, 79.7 percent, are owner occupied; 20.3 percent are renter occupied.

Preston Heights

Preston Heights is located on the east side of Highway 101 and just north of Humboldt State University. This neighborhood has seen much growth in recent years (See Chapter V, GROWTH AND DEVELOPMENT). Preston Heights contains a lot of student housing because of its proximity to Humboldt State University.

Preston Heights contains 6.6 percent of Arcata's total population and 3.6 percent of the City's housing units. Owner-occupied units make up 59.8 percent of the housing units; 40.2 percent are renter occupied.

Spear, West End, and Valley West

These neighborhoods, combined by the 1980 Census Neighborhood Statistics Program, are Arcata's northernmost neighborhoods. Spear, West End, and Valley West are located on both sides of Highway 101 and contain the westernmost end of Highway 299. These neighborhoods include an industrial area, Aldergrove Industrial Park, agricultural lands, residential and multi-family housing, and a shopping center.

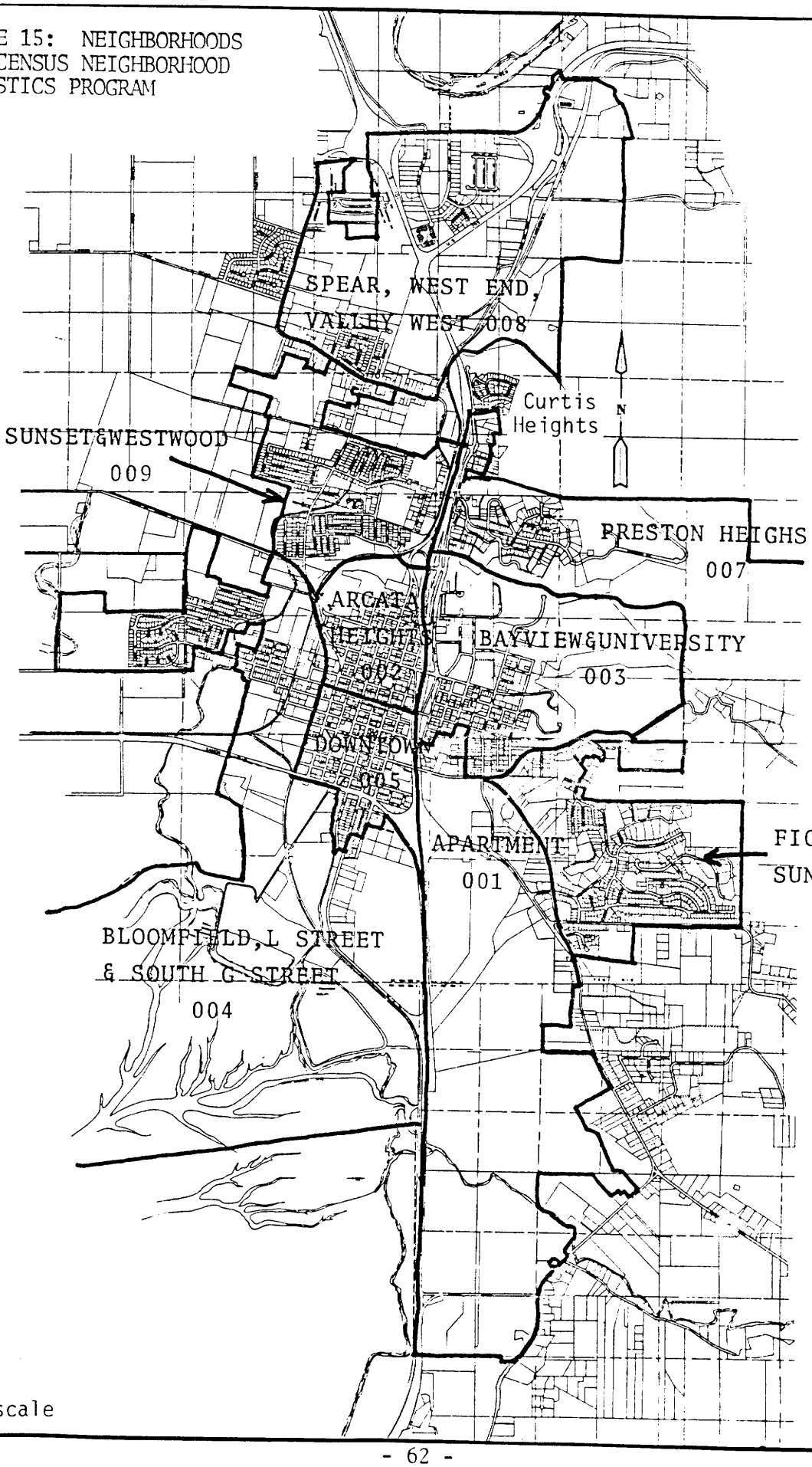
The Spear, West End, and Valley West neighborhoods contain 10.3 percent of the total population and 10.8 percent of Arcata's housing units. Owners occupy 65.7 percent of the housing units; 34.3 percent are occupied by renters.

Sunset and Westwood

The combined Sunset and Westwood neighborhoods are located west of Highway 101 and north of Arcata Heights. They are primarily residential neighborhoods with a number of multi-family units. The neighborhood of Westwood contains a small shopping center.

Sunset and Westwood contain 16.6 percent of Arcata's residential population and 16.5 percent of Arcata's housing stock. Owner-occupied units make up 48.9 percent of the residential units; 51.1 percent of the residential units are renter-occupied.

FIGURE 15: NEIGHBORHOODS
1980 CENSUS NEIGHBORHOOD
STATISTICS PROGRAM



Curtis Heights

Curtis Heights was annexed into the City of Arcata in 1982 and was not included in the 1980 Census Neighborhood Statistics Program. The Neighborhood is located north of Preston Heights and east of Sunset and Westwood. It is a residential community that has some industry within it.

In summary, Arcata is relatively evenly distributed among its residential houses, multi-family housing, industry, agriculture, and its areas of business. As information from the 1990 census becomes available, more accurate information on neighborhood statistics will be included in the 1991 State of the City Report.

[Source: 1980 Census, Neighborhood Statistics Program]

MULTI-FAMILY HOUSING

In March of 1990 the Community Development Department student interns conducted a telephone survey of multi-family rental housing consisting of four units or more. The student interns surveyed a total of 1,530 units.

The survey collected information on the number of bedrooms, rent amount, vacancies, and type of renters. The survey did not include trailer parks and hotels/motels. The survey also obtained general information regarding utilities but the inconsistent quality of the data did not permit statistical analysis.

The survey placed renters in three categories: students, families, and working singles/couples. The student population were the majority of renters, 62.3 percent; working singles/couples were next highest number of renters, 30.5 percent; and families made up the remaining 8.1 percent of the renters.

The results show that rents in Arcata have risen slightly by 5.6 percent since 1989. See FIGURE 16: AVERAGE RENT IN ARCATA BY UNIT TYPE. There was a sharp 10.4 percent increase in the rent charged for two-bedroom units. Rents have increased gradually in the past five years, reflecting increased maintenance costs and housing demand.

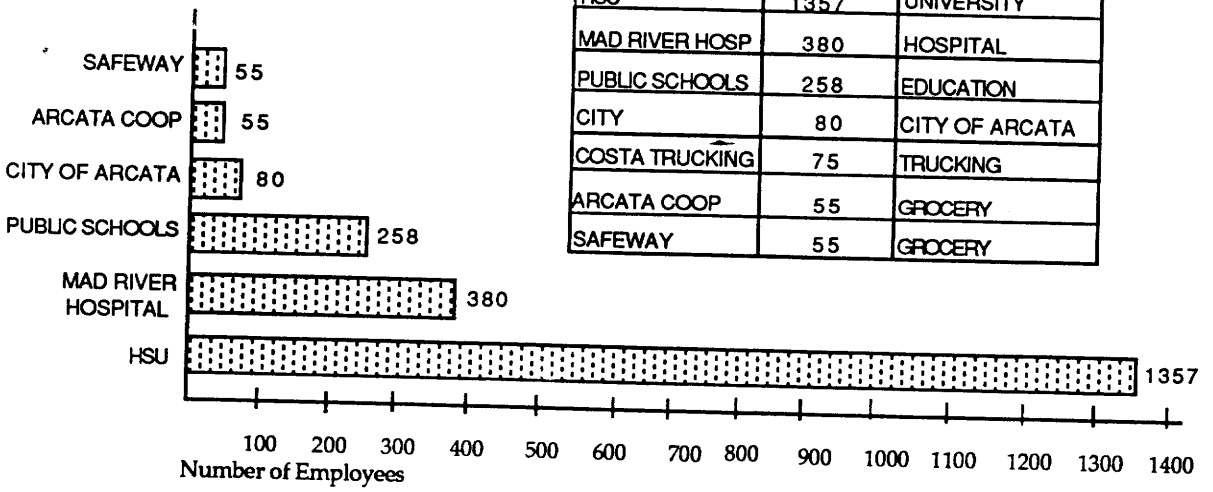
The survey obtained the number of vacancies both for August 1, 1989 and February 1, 1990. The City's rental vacancy rate for August was 0.9 percent and for February 0.3 percent. According to the California Department of Housing and Community Development, a vacancy rate less than five percent indicates an inadequate housing stock.

FIGURE 18

EMPLOYMENT IN ARCATA

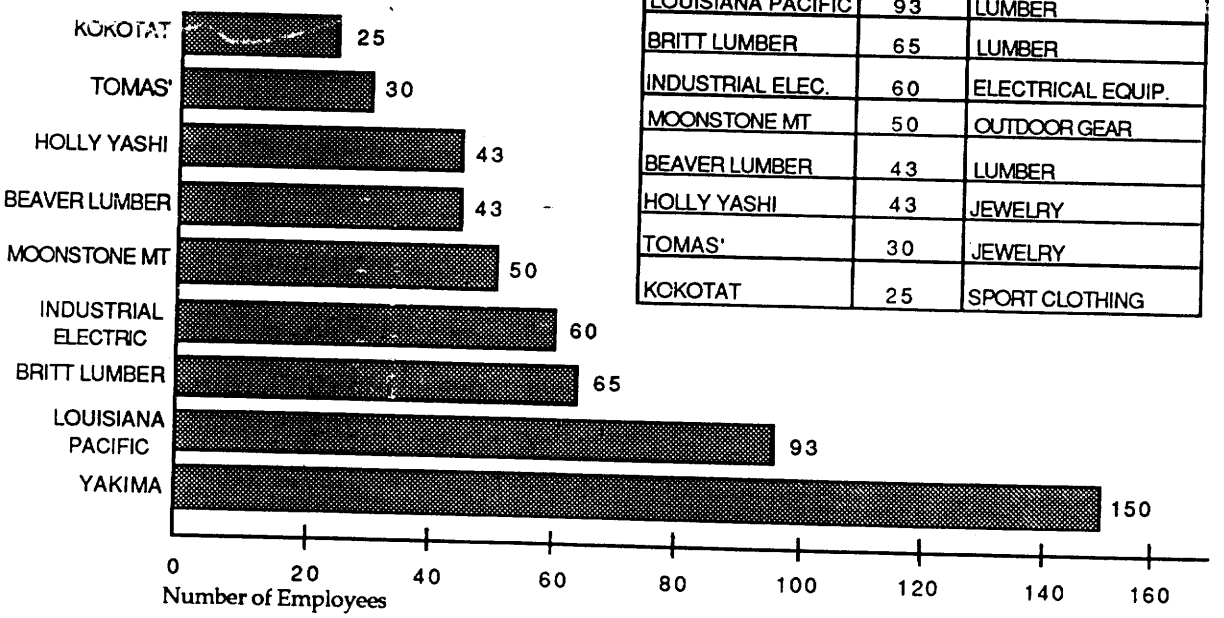
NON-MANUFACTURING EMPLOYMENT

NAME	EMPLOYED	BUSINESS
HSU	1357	UNIVERSITY
MAD RIVER HOSP	380	HOSPITAL
PUBLIC SCHOOLS	258	EDUCATION
CITY	80	CITY OF ARCATA
COSTA TRUCKING	75	TRUCKING
ARCATA COOP	55	GROCERY
SAFEWAY	55	GROCERY



MANUFACTURING EMPLOYMENT

NAME	EMPLOYED	BUSINESS
YAKIMA	150	CAR TOP CARRIERS
LOUISIANA PACIFIC	93	LUMBER
BRITT LUMBER	65	LUMBER
INDUSTRIAL ELEC.	60	ELECTRICAL EQUIP.
MOONSTONE MT	50	OUTDOOR GEAR
BEAVER LUMBER	43	LUMBER
HOLLY YASHI	43	JEWELRY
TOMAS'	30	JEWELRY
KOKOTAT	25	SPORT CLOTHING



CHAPTER VIII. ENVIRONMENTAL QUALITY

INTRODUCTION

This chapter presents a brief discussion of Arcata's environmental quality. Environmental quality includes air quality, water quality, and seismicity.

AIR QUALITY

Air quality is a sensitive issue in Arcata. Air quality monitoring indicates, with one exception, that Arcata is well within the State standards for all pollutants. The exception, particulate matter of less than 10 microns (PM10), is also exceeded by most other counties in the State.

There is, however, an increasing concern about air quality in Arcata. A record number of complaints were registered in 1989, equaled only in 1969, the year when these complaints were first recorded.

Residents of Arcata registered 407 complaints in 1989, as opposed to 73 air quality complaints in 1988. Of those complaints, 150 complaints were related to odors, smoke, or fallout from the pulp mills; 119 complaints were related to smoke from a flakeboard incinerator; 88 complaints were related to smoke from so-called "slash burning" related to the lumber industry; and 50 complaints were related to smoke, odor, or fallout from a variety of industrial, domestic, or miscellaneous sources.

The North Coast Unified Air Quality Management District monitors the air quality in Humboldt County. Air quality monitoring was stopped in Arcata in 1982 due to funding cutbacks. Air quality in Eureka was used as an indicator of air in Arcata.

Limited monitoring took place in Arcata during 1988, showing that the air quality in Arcata was indeed similar to Eureka. However, monitoring for Arcata may be resumed in 1990 due to Arcata's growth.

In November of 1988, the Louisiana Pacific Arcata Particleboard Plant was monitored for output, and was discovered to be out of compliance for particulate matter. After public hearings, LP requested a variance in output of particulate matter while they deal with the problem. This request was denied.

In 1989, the City reviewed the General Plan with respect to air quality policies. The General Plan had very little language on air quality until that time. The City revised existing policies to emphasize the importance of air quality, and added two new policies focusing on improving Arcata's air quality.

[Sources: Area Designations for State and National Ambient Air Quality Standards, State Air Resources Board; Leonard Herr, North Coast Unified Air Quality Management District.]

WATER QUALITY

Water delivered by the City of Arcata is purchased from the Humboldt Bay Municipal Water District (HBMWD). This water is taken from wells located in the bed of the Mad River just northeast of Arcata along State Highway 299. These wells, called Ranney Wells, draw water from the riverbed at depths ranging from 60 to 90 feet. This naturally filtered water is then disinfected via chlorination. Chlorinated water is then piped to HBMWD customers, including the City of Arcata. The State is currently developing new regulations that will eventually be used to determine whether Ranney Well water is sufficiently influenced by the surface water of Mad River to require compliance with Surface Water Treatment Standards. Should Ranney Well water be determined to be surface water influenced, a water filtration plant may need to be constructed.

This determination is about one year away, and until the determination is made the City considers Ranney Well water to be groundwater.

The City of Arcata receives delivery of this water at the pump station at 2815 Alliance Road. Treatment at this facility consists of the addition of fluoride as mandated by the citizens of Arcata and additional chlorination to maintain a required chlorine residual throughout the water distribution system.

The quality of the City of Arcata water is determined by comparing the results of tests conducted by HBMWD and the City of Arcata, with the maximum contaminant levels (MCL's) set by the State of California Department of Health Services (SCDHS) and the Environmental Protection Agency (EPA). Under current laws, the MCL's may change to reflect new health information or refined testing procedures. The remainder of the report contains texts and tables which allow one to make comparisons of tests of the City's water against the established MCL's.

These test results show that the City of Arcata's water is of excellent quality and purity. If you would like additional information concerning the water system, please contact the City of Arcata Water Department at (707) 822-5957 extension 39.

[Sources: Frank Klopp, Director, and Steve Leiker, Assistant City Engineer, Department of Public Works]

PARKS AND RECREATION FACILITIES AND PROGRAMS

Arcata and the surrounding area have much to offer both to the "outdoor person" and recreational enthusiast. The ball player, hiker, jogger, and bicyclist have easy access to outdoor activities. The Parks and Recreation Department also provides many programs for people of all ages.

City Facilities

There are fifteen developed parks (over 37 acres) within the City. In addition, the City has over 50 acres of undeveloped parkland. TABLE 8, below, shows the developed facilities.

TABLE 8: RECREATIONAL FACILITIES IN ARCATA *

Picnic areas	12	
Playgrounds	12	
Tennis courts	5	(Two lighted)
Basketball courts	8	
Baseball fields	2	(One lighted)
Softball fields	7	(One lighted)
Community Swimming Pool	1	(Indoor)

* Does not include University facilities.

Work on the Arcata Community Park/Sports Complex began in the Spring of 1989. The Complex will cover thirty-two acres and include two tennis courts, three softball fields (two will be lighted), two soccer/football fields, commercial recreation facilities and a community center. The Complex site is located between 7th and Union Streets and the freeway. [Please see the Chapter X. SPECIAL PROJECTS AND SERVICES.]

Arcata Marsh

The Arcata Marsh and Wildlife Sanctuary is one of the first of its kind in the United States. The Sanctuary is part of Arcata's sewage disposal system, where wastewater is routed through restored wetland habitat and released into Humboldt Bay.

Formerly a sanitary landfill, the Arcata Marsh and Wildlife Sanctuary now provides 154 acres of fish and wildlife habitat consisting of a series of five marshes and one recreational lake. Facilities at the Sanctuary include a boat ramp, picnic tables, footpaths, and bird blinds.

[redacted]ity actively stocks the Franklin R. Klopp Lake with [redacted]. The Audubon Society offers Saturday morning walks [redacted]ound the Marsh for those interested in learning about the [redacted]irdlife. The Arcata Marsh and Wildlife Sanctuary is discussed in detail in Chapter X. SPECIAL PROJECTS AND SERVICES.

Community Forest

A ten-minute walk from downtown Arcata takes you to the heart of the Community Forest. In the forest you will discover a model redwood forest with towering trees, streams and characteristic vegetation and wildlife. The 600-acre Arcata Community Forest contains 17 trails that are excellent for walking, hiking, running, and bicycling.

The City Manages the Arcata Community Forest for timber and wildlife as well as for recreation. The forest is further discussed in Chapter X. SPECIAL PROJECTS AND SERVICES.

Recreation Programs

The Parks and Recreation Department offers numerous exercise classes, cultural classes, and participatory sporting events on an ongoing basis throughout the year. The City's programs serve Arcata citizens in general and include special programs for seniors and youth.

Programs specifically for seniors are offered at the Arcata Community Center. These activities include crafts, bingo, exercise classes, and blood pressure tests. Some of these activities are available at a cost of one dollar, but most activities are free.

Services for children include Aikido, basketball, and softball. The Department offers special day camps in the Spring and Summer.

The Parks and Recreation Department also sponsors a very active gymnastics program. The program serves 300-350 children per each six-week session. Often there is a waiting list of 100 or more. Rhythmic gymnastics, gymnastics for mothers and infants, and gymnastics for young children are especially popular.

Programs for adults include Aikido, basketball, and aerobics. Athletic activities, orchestra, dance, art, cooking, language, and other special interest programs are offered at certain times of the year for people of all ages.

In the summer the Recreation Department presents several special programs including two series of free concerts on

FIGURE

Arcata Marsh and Wildlife Sanctuary

The Arcata Marsh and Wildlife Sanctuary (AMWS) was developed to successfully integrate sewage treatment and wastewater disposal requirements, policies of the California State Water Quality Control Board, and the California Costal Zone Wetlands Enhancement program. The AMWS reclaimed wetlands that had previously been a landfill (dump) and an abandoned lumber mill.

The sanctuary is over 170 acres and includes a brackish water lake and Butcher's Slough. See FIGURE 22: THE ARCATA MARSH AND WILDLIFE SANCTUARY MAP. A portion of the 170 acres is also part of an internationally-recognized wastewater treatment facility. Secondarily-treated water is circulated through a five-marsh system that allows natural organisms to filter the water before it is released into the Bay. The result is a nutrient-rich habitat that attracts thousands of birds to the sanctuary.

Birdwatchers enjoy the more than 200 species of birds attracted to the marsh, including some endangered species. The sanctuary is used as an educational and research site by students from Humboldt State University (HSU) and College of the Redwoods, as well as local grade and high schools.

The AMWS attracts many local people and tourists. The marsh provides a place for people to relax, escape, recreate, and educate themselves. The AMWS includes over 4.5 miles of trails many of which have interpretive signs. The sanctuary allows people to enjoy nature while knowing that it is also providing a needed city service.

[Source: David Hull, Aquatic Resources Specialist, Public Works Department]

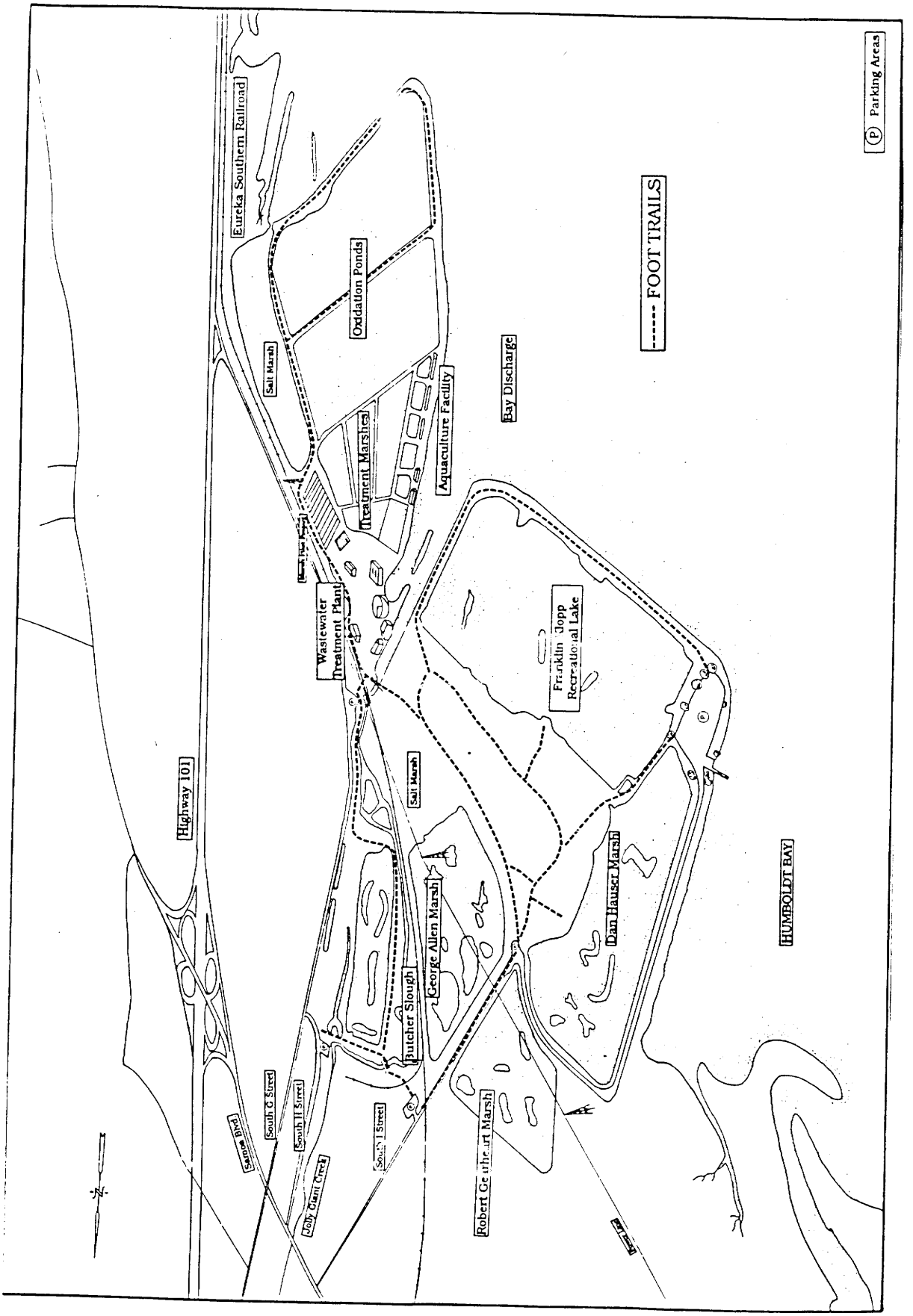
Arcata Marsh Interpretive Center

Conceptual plans have been completed for a 4,100 square foot Arcata Marsh Interpretive Center (AMIC). The center will focus on the historical, biological, and technical aspects of the AMWS, providing a unique educational and Interpretive experience (FIGURE 23: ARCATA MARSH INTERPRETIVE CENTER).

The design of the AMIC integrates the outside environment with the inside space. The center will contain a exhibit hall, a "living marsh" library, a multi-purpose room, and a research module.

The exhibit hall will feature educational displays that connect the outside environment through window placement and the living marsh library. The living marsh library will be an extension of the inside exhibits; part of a marsh will be surrounded by a board walkway. Native plants will be

FIGURE 22: ARCATA MARSH AND WILDLIFE SANCTUARY MAP



landscaped around the water's edge to provide close contact with the natural environment.

The multi-purpose room will provide a place for multimedia presentations and special gatherings. The research module will allow researchers access to wet lab facilities.

The design of the AMIC was made possible by a $100,000 grant from the Ford Foundation. The funds for building the project (approximately $600,000) are currently being raised by donations, fund raising events, and grants.

Friends of the Arcata Marsh (FOAM) is the support group and local fundraising entity for the interpretive center. This non-profit organization will also provide volunteer staff for the AMIC.

[Source: Arcata Marsh Interpretive Center Brochure]

Wastewater Aquaculture

Arcata's Wastewater Aquaculture facility is located inside the oxidation ponds' western levee. See FIGURE 22: ARCATA MARSH AND WILDLIFE SANCTUARY MAP. The City has raised salmon, trout and other species of fish in these 0.3 acre ponds since 1969.

The City of Arcata funds all local aquaculture projects from sewer fees and (recently) small grants provided by the California Department of Fish and Game. Dr. George Allen, fisheries professor at HSU, is the director of this program. Seven rearing ponds and incubation facilities are used to raise salmon, steelhead, and cutthroat trout.

Dr. Allen's goal is to restore self-sustaining runs of anadromous fish to the creeks that travel through Arcata. He completed a great deal of research which show fish can be grown in wastewater;

> "Experiment indicated that a 50:50 mixture of wastewater to seawater provide a brackish-water medium that would not only support juvenile salmon, but would do it at a much lower cost than traditional hatchery techniques. The cost savings came from the use of the wastewater as a freshwater source and from the nutrients in the water. These nutrients increased the growth of algae, which in turn, provide food for small invertebrates that live in the brackish waters. Juvenile trout and salmon placed in the ponds feed on the invertebrates."
>
> [Excerpted from Western City; David Hull, Aquatic Resources Specialist, Public Works Department]

Tidelands

In addition to Arcata's Wastewater Aquaculture project, The City owns 1,500 acres of tidelands. These tidelands are the home for some of the last remaining native oysters in the State of California. Because of the importance of these species, Arcata is also actively engaged in biological and cultivation research on oysters.

The City updated its mariculture lease forms and restrictions following inquiries into mariculture on the City's 1,200 acres of tideland by oyster farmers. This update included: identifying areas restricted for Mariculture purposes due to the sensitive habitats; viewshed considerations; and identifying the appropriate distance from the wastewater treatment plant (a "two-hour" safety zone). At this time, one firm leases tidelands from the City for the purpose of oyster culture.

[Source: David Hull, Aquatic Resources Specialist, Public Works Department]

THE ARCATA COMMUNITY FOREST AND JACOBY CREEK FOREST

The City of Arcata manages the only community-owned multiple-use forests in the State of California. The City employs a full-time Forest Resource Specialist to implement and oversee the management practices. Revenue from timber harvests go into parks acquisition and forest management activities.

The City's forest land is made up of two forest sites (FIGURE 24: FOREST LOCATION MAP). The **Arcata Community Forest** is used as a multiple-use forest for timber production, recreation, education, and enjoyment.

The **Jacoby Creek Forest**, is fairly remote and is not accessible to the general public. The City manages the forest for commodity and amenity values including wildlife, timber production, watershed, viewshed, and long term productivity.

The City conducted timber harvesting activities on the Jacoby Creek Forest, removing 2.44 million board feet (mmbf) during 1989. The areas cut included thirteen small patch cuts ranging in size from 0.8 to 4.5 acres in size and a selection cut of six acres. The City sold the logs to Eel River Sawmills in 1988 as part of a 4.5 mmbf sale to complete the early payoff of parkland acquisition bonds.

Timber operations included the construction of three-quarters of a mile of temporary road and one third of a mile of permanent road. The City ripped, re-contoured, and re-vegetated the temporary roads. Seventy percent of the 1989 harvest volume made use of a cable yarder due to the steepness of the slopes and the desire to minimize road construction; thirty percent of the 1989 harvest used tractors.

The City re-forested the harvested areas with redwood and Douglas fir seedlings. Prior to re-forestation, the ground was prepared by the lopping and scattering of slash material instead of burning. Tree growth, tree mortality and cumulative forest and watershed impacts continue to be monitored to insure compliance with State Forest Practice Regulations and with the City's own standards and guidelines as stated in the Arcata Forest Management Plan.

Forest maps and data bases have been loaded onto a computerized geographic information system (GIS). The system will allow easier map production and updates as well as provide a powerful analysis tool to model forest management impacts and activities. Arcata's forest is the pioneer project on the City's geographic information system. Other City departments are in the process of loading their maps and data bases on the system.

The Community Forest Christmas tree farm sold 500 Christmas trees to local schools grossing $2,000 for the City. Re-planting took place on the Christmas tree farm with a variety of species including Scotch Pine, Bishop Pine, and Monterey/Knobcone hybrids.

Recreational use continues to increase in the Arcata Community Forest. Recreational uses include hiking, mountain biking, and horseback riding. In addition, local schools and Humboldt State University use the Arcata Community Forest as an outdoor lab and research site. The City provided tours, talks and slide shows to over fifteen local and visiting school classes and groups.

The self-guided historic logging trail and nature trail loop trails continue to be popular. Three brochures on the Community Forest trails are available from the City. The trails also have several interpretive signs.

The City's management practices attempt to consider wildlife habitat "components" during timber operations with snags, down logs, and wide stream side zones being left behind for habitat structure.

The Forest Management Advisory Committee and City staff are in the process of re-evaluating the 1980 Forest Management Plan. The goal is to re-write the plan to guide forest management activities for the next management cycle.

[Source: Mark Andre, Forest Resource Specialist, City Manager Department]

ADOPT-A-CREEK PROGRAM

The City of Arcata appointed the Arcata Urban Creeks Task Force to develop programs and a master plan for Arcata's creeks. The Task Force coordinates volunteers on Arcata creek projects;

reviews and comments on development plans that may have an impact on local creeks; and assists Parks and Recreation/Public Works on creek restoration projects. The Task Force is a temporary committee whose tasks are outlined by the City Council.

The Urban Creeks Task Force has been in operation for two years. The Task Force primary task is to develop a master plan for all of Arcata's Creeks. Current City ordinances do not address stream protection. The plan will develop standards to protect the creeks, restore damaged creeks, and educate the community about the creeks.

The Task Force is in the process of publishing an Adopt-a-Creek brochure aimed towards school and action groups. The program identifies stream areas that need protection, and suggests public awareness and clean-up efforts for groups to "adopt."

Three groups will be among the first to adopt a creek as part of the program. Arcata High School is working toward adopting a portion of Jolly Giant Creek and has already stenciled messages on street drains that alert the public to the presence of the creek. Equinox School and the Six Rivers Chapter of Trout Unlimited have planted hundreds of native trees and shrubs as a step toward adopting portions of Campbell Creek and Janes Creek respectively.

Arcata will see more of these types of projects as the community becomes more involved in the Adopt-a-Creek Program.

[Source: Nancy Reichard, Redwood Community Action Agency (RCAA); David Hull, Aquatic Resources Specialist, Public Works Department]

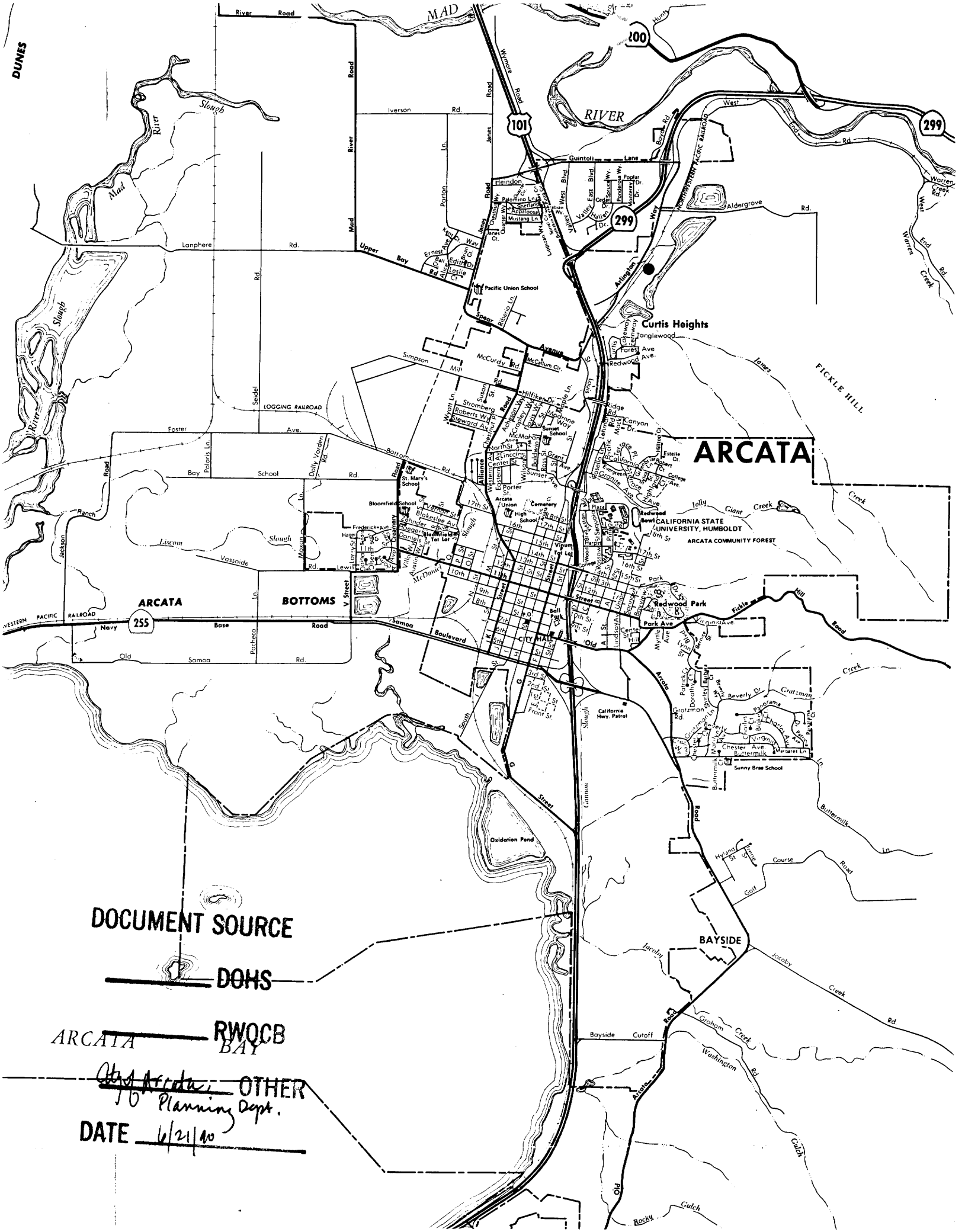
ARCATA COMMUNITY ACCESS TELEVISION

Arcata Community Access Television (ACAT), Cox Cable channel 31 went "on the air" in December 1988. ACAT is a public access channel for the people of Arcata.

ACAT was made possible by a franchise that was negotiated between the City of Arcata and Cox Cable in 1987. The City then appointed three incorporators charged with the responsibility of creating a non-profit corporation for the administration of ACAT. In May of 1988 the incorporators appointed a board of directors.

The City purchased video equipment including cameras, editing and head-end (broadcasting) equipment. The franchise agreement with Cox Cable specified that the funds used to purchase the equipment would be recouped by the City by way of a fee of $0.25 per month to all Arcata cable subscribers.

There are three main divisions of ACAT. The three divisions are municipal, education, and public access.



DOCUMENT SOURCE

~~DOHS~~

~~RWQCB~~

~~Old Arcata~~ OTHER

To Planning Dept.

DATE 6/21/00

MAD RIVER BASIN

11481000 MAD RIVER NEAR ARCATA, CA

LOCATION.--Lat 40°54'35", long 124°03'35", in NW 1/4 NW 1/4 sec.15, T.6 N., R.1 E., Humboldt County, Hydrologic Unit 18010102, on right bank 100 ft upstream from bridge on U.S. Highway 299, 1.0 mi downstream from Warren Creek, and 2.8 mi northeast of Arcata.

DRAINAGE AREA.--485 mi^2

PERIOD OF RECORD.--October 1910 to September 1913, August 1950 to current year. Monthly discharge only for some periods, published in WSP 1315-B.

REVISED RECORDS.--WDR CA-72-1: 1965(M).

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 12.79 ft above National Geodetic Vertical Datum of 1929. December 1910 to September 1913, nonrecording gage at site 0.1 mi upstream at different datum. Aug. 15, 1950, to July 23, 1956, water-stage recorder at site 0.6 mi upstream at datum 11.00 ft higher. July 24, 1956, to Apr. 8, 1965, water-stage recorder at datum 5.00 ft higher, at present site.

REMARKS.--Estimated daily discharges: Dec. 2. Records good except those for flows below 150 ft^3/s, which are fair. Flow regulated by Ruth Reservoir (station 11480400), 68 mi upstream, beginning in July 1961. Water is diverted 0.5 mi upstream from station for municipal supply and industrial use in Humboldt Bay area.

AVERAGE DISCHARGE (adjusted for diversions).--41 years, 1,494 ft^3/s, 1,082,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 81,000 ft^3/s, Dec. 22, 1964, gage height, 30.7 ft, present datum, from high-water profile and flood routing study; minimum daily, 0.10 ft^3/s, Aug. 29, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 19,700 ft^3/s, Dec. 10, gage height, 13.91 ft; minimum daily, 19 ft^3/s, Sept. 12, 13.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	50	874	528	1650	340	88	535	3820	106	34	30
2	25	55	8640	493	1420	330	86	427	2630	93	32	28
3	29	46	3870	855	1240	299	119	389	1570	85	32	31
4	28	38	4960	1450	1080	287	156	352	1180	82	31	33
5	28	33	3420	1740	971	313	128	330	1240	73	34	28
6	25	30	6980	1610	882	297	105	408	1490	67	35	27
7	25	34	5570	1360	828	272	96	424	1700	59	44	27
8	28	31	4300	1630	798	252	90	579	1270	57	44	29
9	24	41	3760	4190	785	251	83	598	1070	52	41	28
10	27	43	13800	6010	758	238	75	538	928	47	37	27
11	27	34	7450	8880	704	209	68	453	756	44	35	24
12	28	30	3850	5850	665	191	64	365	620	41	35	19
13	28	84	2240	3990	654	180	65	414	541	40	36	19
14	28	131	1470	4070	632	173	85	369	471	43	35	28
15	28	85	1120	8420	594	164	75	328	423	37	37	36
16	31	64	894	8870	567	150	70	496	373	34	37	32
17	32	57	727	5760	533	140	65	747	347	33	36	33
18	30	55	616	3780	506	129	62	529	291	32	35	33
19	26	52	536	2770	482	121	73	433	254	30	31	33
20	27	64	485	2130	462	118	153	373	234	27	29	40
21	27	204	534	1800	448	125	198	326	210	33	27	35
22	26	131	863	1610	437	128	320	264	189	33	26	33
23	43	70	823	1570	415	160	397	234	174	28	25	33
24	45	52	634	1620	364	216	361	210	161	26	26	31
25	36	61	563	1570	342	176	388	189	148	28	33	27
26	31	61	517	1490	328	155	338	173	147	33	33	25
27	29	50	485	1410	314	147	267	166	136	33	32	23
28	31	43	495	1320	305	134	225	193	132	33	35	20
29	33	35	529	1470	298	118	251	275	120	36	34	27
30	36	39	579	2070	---	103	412	230	116	37	31	24
31	33	---	603	1860	---	98	---	230	---	35	32	---
TOTAL	920	1803	82187	92176	19462	6014	4963	11577	22741	1437	1044	875
MEAN	29.7	60.1	2651	2973	671	194	165	373	758	46.4	33.7	29.2
MAX	45	204	13800	8880	1650	340	412	747	3820	106	44	40
MIN	24	30	485	493	298	98	62	166	116	26	25	19
AC-FT	1820	3580	163000	182800	38600	11930	9840	22960	45110	2850	2070	1740
a	4850	3980	4360	4480	4360	4700	4450	4970	4740	5470	5340	5180

CAL YR 1987 TOTAL 327185 MEAN 896 MAX 13800 MIN 13 AC-FT 649000
WTR YR 1988 TOTAL 245199 MEAN 670 MAX 13800 MIN 19 AC-FT 486400

a Diversion, in acre-feet, for municipal supply and industrial use; provided by Humboldt Bay Municipal Water District.

Water Resources Data
Water year 1988 — from U.S.GS.

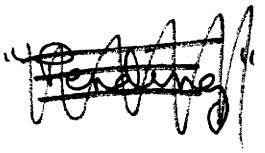
Subject: Louisiana Pacific Corp.

contact: Caren Glassel TSCA

date: 9-19-83

Caren informed me today that L.P.C. will be placed on the reinspection list but that it is a site of lower priority. Pending

by: Cheryl Lehr T-4-2



CAD980673578

Harland & Gromala

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(707) 444-9281

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(707) 725-4426

1225 MARSHALL STREET
CRESCENT CITY, CA 95531
(707) 465-3894

May 7, 1991

Mr. Paul La Courreye
EPA Region IX Site Assessment Manager
U. S. Environmental Protection Agency
75 Hawthorne Street
San Francisco, California 94105

Re: Preliminary Assessment Reevaluation
Louisiana-Pacific Particleboard Plant
Arcata, California

Dear Mr. La Courreye:

We represent the heirs of Frank Martin, who are lessors of a portion of the real property occupied by Louisiana-Pacific's flakeboard operation at Arcata, California.

We have seen the August 30, 1990, preliminary assessment reevaluation by Ecology and Environment, Inc., and Bert Krages' letter to you of January 3, 1991.

We would like you to advise us concerning EPA's decision whether or not to list the site as a high priority SSI as recommended, and also as to the results of any further investigations the EPA or others make of the site.

Very truly yours,

HARLAND & GROMALA

By John W. Warren

JWW/ms

cc: Daniel Martin
Mary Simons

Louisiana-Pacific Corporation

Western Division

P.O. Box 158, LP Drive
Samoa (Humboldt County), California 95564
707 / 443-7511

January 20, 1989

Mr. Mark Harvey
North Coast Regional
Water Quality Control Board
1440 Guerneville Road
Santa Rosa, CA 95403

Dear Mr. Harvey:

Re: **REPORT OF PROCESS WASTE WATER - ARCATA PARTICLEBOARD**

This letter is in response to your request for a report on the operation and compliance with discharge prohibitions of Order No. 86-2 for the scrubber clarifier and stormwater runoff collection sump at the Louisiana-Pacific Corporation Arcata Particleboard Plant.

The particulate scrubbers used for air pollution control at the plant spray water into the exhaust gas stream of two furnish dryers. The water spray droplets collect escaping dry dust particles and gasses. The scrubber water operates in a continuous recycle system using a 2-240 gpm pumps with fresh makeup water being added to account for evaporation and what water vapor is carried out with exhaust gases. The clarifier acts as a settling pond for the scrubber water. A drag chain pulls the large solid wood particles out of the clarifier for disposal at the local landfill.

The dimensions for the straight side sections of the clarifier tank are 10'W X 10'H X 30'L. The sloped section for the drag chain is 10'W X 10'H X 14' slope side. The clarifier tank has an overall volume of 26,000 gallons. The sump pump cut-off level to the clarifier is at 23,200 gallons. The normal operating volume in the clarifier is 20,000 gallons.

Ref. # 9

It is necessary to mention, as we have before, that a new dry air pollution control system is being planned that will eliminate the need for the clarifier and scrubbers, and hopefully clean up that area of the mill significantly.

What is described as the street sump is operated to collect stormwater runoff for a large area surrounding the southeast portion of the facility and discharge the runoff to the log pond behind the plant. Two 300 gpm pumps in the sump are set to operate automatically when the level in the sump is between 42 and 45 inches from the top of the sump.

A third pump was recently added to the sump as a result of a request that you made. The third pump was installed to prevent washwater, a prohibited discharge, from being sent to the pond. The washwater is generated when fire hoses are used to remove fine wood particles from the rotary dryers, exterior walls and roof areas surrounding the dryers due to extreme fire hazard. This practice is a fairly routine process, but water does run down the gutters and walls adjacent to the resin tank area and washwater was observed to exhibit a coloration similar to the resin products. To prevent the washwater from being discharged via the sump to the pond, a scheme was devised with the third pump to send washwater, assuming that its volume would be much less than stormwater, to the clarifier to act as makeup water for that system. Because the washwaters could be used as makeup, the initial plan to sewer the water to the city sewer system was temporarily abandoned. The third pump is set to activate at a lower water level than the stormwater runoff pumps in the sump. The pump to the clarifier is set to discharge when the level in the sump drops below 48 inches and turns off when the level drops below 52 inches from the top of the sump.

As a result of the malfunction with the clarifier overflow during your inspection, a two inch plastic line is being installed which will send the clarifier overflow containing the recently added washwaters to the sump within the resin tank containment area. The float at that sump pump to city sewer will again be adjusted to accommodate the possible overflow volume from the clarifier.

Attachment I is a complete report of what occurred prior to your inspection and the discovery of the clarifier water overflowing to the sump, and what immediate steps were taken to prevent another malfunction of the system. I sincerely believe that the malfunction will not be repeated.

A float in the clarifier shuts off the third sump pump if water rises above one foot from the top of the clarifier wall. The overflow to the sewer discharge will be placed at the point where the sump pump from the street sump is shut off due to high level.

The system complies with prohibition 1 of Order No. 86-2 as washwater will be diverted to the clarifier and then to the city sewer system, and not discharged to the pond and hence to the tributary to Janes Creek.

A flow diagram (Fig. 1) of the stormwater, washwaters and scrubber/ clarifier with details of the system is enclosed.

Please do not hesitate to contact me if you should require further information.

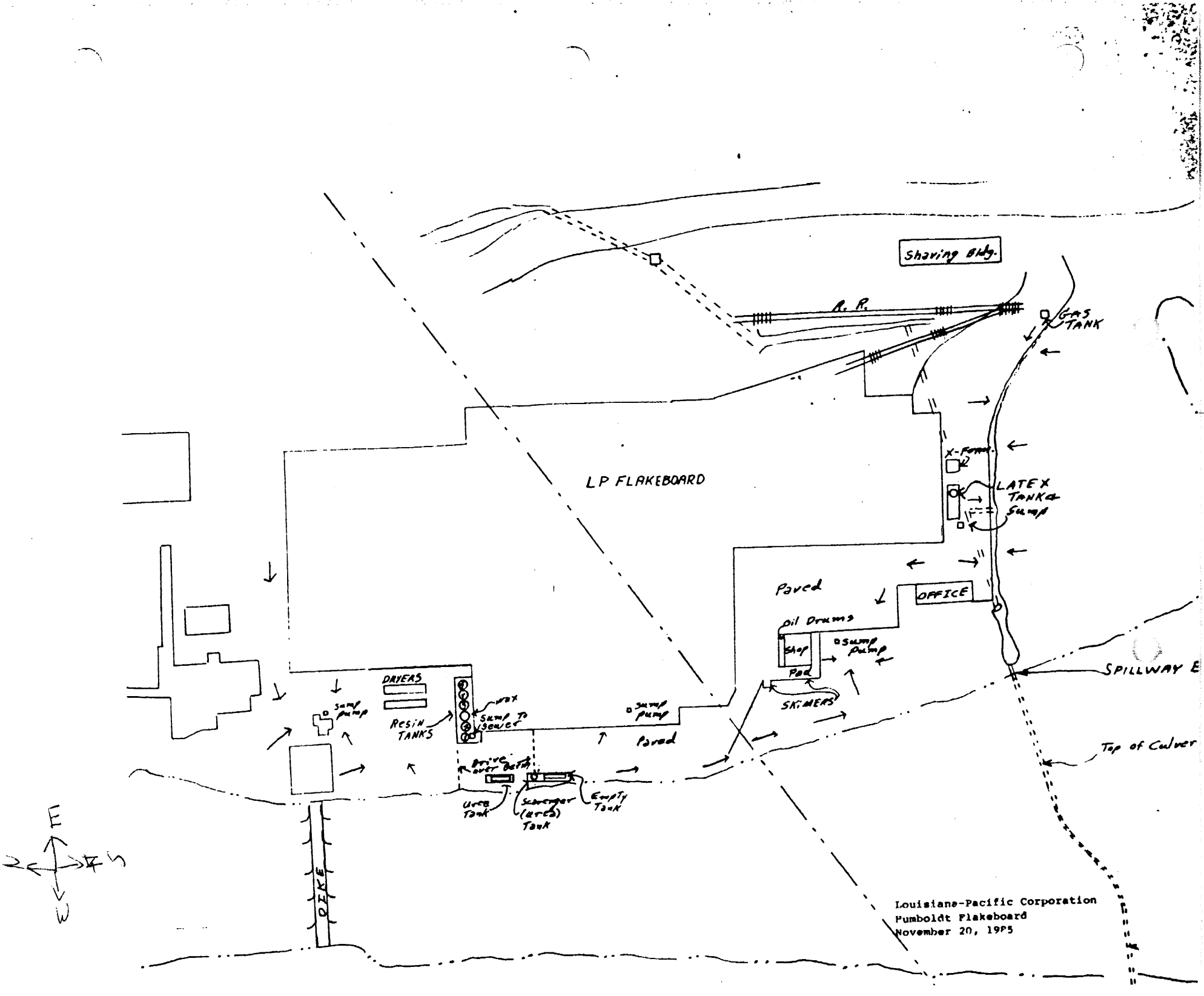
Sincerely,

Elizabeth Smith

Elizabeth Smith
Environmental Engineer

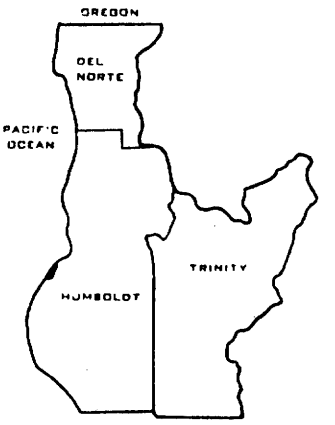
ES:sd

Enclosures


Shaving Bldg.
R. R.
GAS TANK
LP FLAKEBOARD
X-Former
LATEX TANK & Sump
Paved
OFFICE
Oil Drums
Shop
Sump pump
Pad
SKIMMERS
SPILLWAY E
DRYERS
Sump pump
RESIN TANKS
Wax
Sump To Sewer
Sump pump
Paved
Drive over Berth
Urea Tank
Scavenger (urea) Tank
Empty Tank
Top of Culver
DIKE
N
E
S
W
Louisiana-Pacific Corporation
Humboldt Flakeboard
November 20, 1985

NORTH COAST UNIFIED AIR QUALITY MANAGEMENT DISTRICT

5630 SOUTH BROADWAY EUREKA, CALIFORNIA 95501
PHONE (707) 443-3093



December 7, 1990

Mr. Art Green, Manager
Louisiana-Pacific Corp.
Arcata Particleboard Plant
P.O. Box 158
Samoa, CA 95565

Dear Mr. Green:

We have completed our review of the tests for particulate matter, nitrogen oxides, carbon monoxide, and total hydrocarbons from the three driers in order to determine compliance with the June 11, 1990 A/C permit conditions. Please note that permit to operate section VIII, D. pertains to the A/C condition 5 concerning the limiting of the nitrogen oxides emissions to less than a 40 ton per year increase.

Particulate matter is well under the allowable emission rate of 0.20 grains/cubic foot and **40 lb/hr.** At a temperature of 665 F, particulate will **average only about 10 lb/hr** or 25% of the allowable. **Visible emissions** taken by staff during the testing **showed opacities of only 5 to 10% which is well under the 40% allowed by Rule 410 of Regulation 1.**

The emissions of carbon monoxide and total hydrocarbons are not limiting but will be used for emissions inventory purposes.

With all other conditions in the A/C having been met, we are issuing Permits to Operate for the driers with conditions as indicated in the attachment "Driers Permit Conditions".

Louisiana-Pacific is to be commended for the fine drier control system which has been placed in operation. We believe it to be a state of the art system which has dramatically reduced particulate smoke and haze in the vicinity of Arcata.

Sincerely,

Robert Clark

Robert Clark
District Engineer

cc: Liz Smith

Ref # 11

12/7/90

LOUISIANA-PACIFIC, ARCATA
DRIERS PERMIT CONDITIONS

The word PERMIT as used in this approval refers to the Authority to Construct/Modify and any subsequent Permit to Operate issued for the project by the District.

I. Permit Expiration

This Permit shall remain valid as long as the annual renewal fees are paid in accordance with Rule 300 of Regulation 1 of the North Coast Unified Air Quality Management District (NCUAQMD) and all permit conditions are met.

II. Facilities Operation

All equipment, facilities, and systems installed or used to achieve compliance with the terms and conditions of this Permit shall at all times be maintained in good working order and be operated as efficiently as possible so as to minimize air pollutant emissions.

III. Upsets and Breakdowns

The Control Officer shall be notified by telephone immediately after any failure of air pollution control equipment, process equipment, or of a process to operate in a normal manner which results in an increase in emissions above any allowable emissions limit stated in Section VIII of these conditions. Notice and reporting of said upsets and breakdowns shall be made to the District in accordance with the procedures of Rule 540 of the NCUAQMD.

IV. Right to Entry

The Control Officer, The Chairman of the California Air Resources Board, The Regional Administrator of EPA, and/or their authorized representatives, upon the presentation of credentials, shall be permitted:

A. to enter upon the premises where the source is located or in which any records are required to be kept under the terms and conditions of this Permit; and

B. at reasonable times to have access to and copy any records required to be kept under the terms and conditions of this Permit; and

C. to inspect any equipment, operation, or method required in this Permit; and

D. to sample emissions from the source.

V. Transfer of Ownership

In the event of any changes in control or ownership of facilities to be constructed or modified, this Permit shall be binding on all subsequent owners and operators. The applicant shall notify the succeeding owner and operator of the existence of this Permit and its conditions by letter, a copy of which shall be forwarded to the Control Officer.

VI. Severability

The provisions of this Permit are severable, and, if any provision of this Permit is held invalid, the remainder of this Permit shall not be affected thereby.

VII. Other Applicable Regulations

Louisiana-Pacific Corp. shall operate the Arcata particleboard driers in compliance with all other applicable provisions of Regulation 1 of the NCUAQMD.

VIII. Special Conditions

A. Air Pollution Control Equipment:

Louisiana-Pacific Corp. shall continuously operate and maintain in good working order the Geoenergy E-Tube Wet Electrostatic precipitator (ESP) servicing each of the three wood flake driers. Prior to being vented to the atmosphere, all exhaust gases from the driers shall be directed through a multiclone type dust collector and then vented through the ESP.

B. Performance Tests:

On a yearly basis, at a time specified by the Control Officer, Louisiana-Pacific Corp. shall conduct performance tests for NO_x, CO, and particulate matter (PM), and furnish the North Coast Unified Air Quality Management District a written report of the results of such tests. Prior to compliance testing, LP Corp. shall submit a pre-test plan for review and approval by the District prior to testing. Such testing shall be conducted in accordance with the procedures specified in the Districts "Emissions Testing Policy".

C. Emission Limits for Particulate Matter:

Louisiana-Pacific Corp. shall not discharge into the atmosphere exhaust gases which:

1. Contain particulate matter totaling in excess of 40 pounds per hour from all three driers or individually in excess of 0.20 grains per cubic foot of exhaust gas, whichever is the more restrictive condition.

2. Exhibit an opacity of 40 percent or greater for any period or periods aggregating more than three minutes in any one hour.

D. Emission Limits for NO_x:

Louisiana-Pacific Corp. shall not discharge into the atmosphere emissions of nitrogen oxides (NO_x as NO_2) in excess of 294 tons per year from the three furnish driers.

Per year emissions will be determined on 12 month periods beginning with September 1, 1990. Each September 1, begins a new year and cumulative 12 month period. The average of the cumulative monthly averages of the inlet temperatures for the three furnish driers shall not exceed 665 F on a monthly basis.

E. Monitoring:

A data logging system for the recording of the inlet temperatures from each drier shall be required. A daily and monthly summary of the average hourly temperature from each of the three driers shall be determined by the system. The data system shall be calibrated against the temperature readouts of each driers inlet temperature. The thermocouples used for these readings shall be calibrated on a yearly or more frequent basis against a standard thermocouple calibrator or similiar device approved by the District. The District shall be notified prior to these calibrations, so the calibration process may be viewed.

F. Reports:

Louisiana-Pacific shall provide the District with a monthly report of the daily and monthly average inlet temperatures for each drier. Said report shall be submitted no later than the fifteenth day of the following calendar month.

DRIER AND E-TUBE EMISSION TEST SUMMARY
LOUISIANA PACIFIC CORPORATION
ARCATA PARTICLEBOARD PLANT

CORE DRIER

TEST	TEMPERATURE - °F		EMISSIONS - POUNDS/HOUR				STACK FLOW
NUMBER	TARGET	ACTUAL	PM*	NOx	CO	THC	DSCFM
C1	400	390	1.86	11.3	5.4	3.2	36,000
C2	600	600	2.55	16.8	13.4	5.1	33,000
C3	800	795	4.93	23.8	28.0	7.8	32,000

****

SWING DRIER

TEST	TEMPERATURE - °F		EMISSIONS - POUNDS/HOUR				STACK FLOW
NUMBER	TARGET	ACTUAL	PM*	NOx	CO	THC	DSCFM
S1	400	405	1.76	7.6	5.6	3.7	34,100
S2	600	600	2.83	13.7	9.7	6.1	33,000
S3	800	780	5.04	25.1	17.0	10.3	29,400

****

FACE DRIER

TEST	TEMPERATURE - °F		EMISSIONS - POUNDS/HOUR				STACK FLOW
NUMBER	TARGET	ACTUAL	PM*	NOx	CO	THC	DSCFM
F1	400	420	1.82	18.5	2.6	4.5	35,400
F2	600	600	2.58	25.2	6.8	7.7	37,600
F3	800	840	5.04	37.8	11.4	14.9	36,700

* Particulate matter totals include both front and back half catches, including organics.

VISIBLE EMISSION OBSERVATION FORM

COMPANY NAME: Louisiana Pacific Corp.
STREET ADDRESS: West End Road
CITY: Arcata | STATE: CA | ZIP: 95521
PHONE (KEY CONTACT): Art Green | SOURCE ID NUMBER: Flakeboard

PROCESS EQUIPMENT: Wood flake driers | OPERATING MODE: Normal
CONTROL EQUIPMENT: E-Tubes | OPERATING MODE: Normal

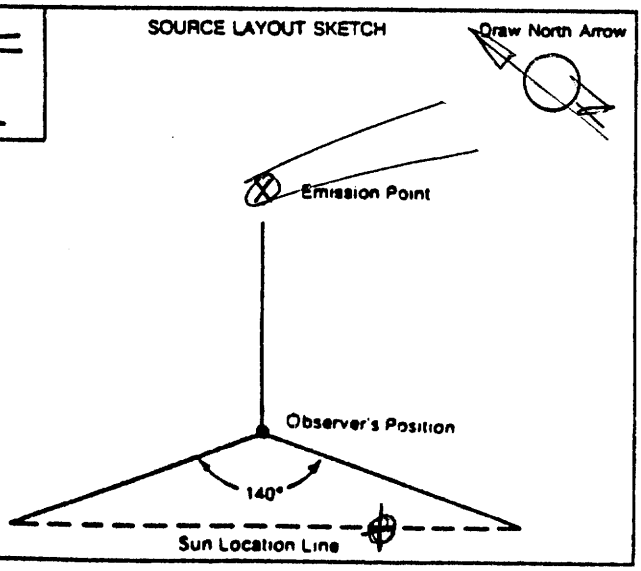
DESCRIBE EMISSION POINT: Wet plume due to water scrubber (outlet of E-Tube)
HEIGHT ABOVE GROUND LEVEL: -75.0' | HEIGHT RELATIVE TO OBSERVER: Start 75.0' End 75.0'
DISTANCE FROM OBSERVER: Start 500yd End — | DIRECTION FROM OBSERVER: Start NE End

DESCRIBE EMISSIONS: Start Water plume from scrubber End
EMISSION COLOR: Start light blue End | IF WATER DROPLET PLUME: Attached ☒ Detached ☐
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED: Start After moisture dissipated End

DESCRIBE PLUME BACKGROUND: Start Trees End
BACKGROUND COLOR: Start Green End | SKY CONDITIONS: Start End
WIND SPEED: Start 5-10 mph End | WIND DIRECTION: Start NW End
AMBIENT TEMP: Start 60 °F End | WET BULB TEMP | RH, percent

Stack with Plume
Sun
Wind

SOURCE LAYOUT SKETCH



OBSERVATION DATE: 9/12/90 | START TIME: 1217 | END TIME: 1247

SEC / MIN	0	15	30	45	COMMENTS
1	5	5	10	5	Particulate test
2	5	5	5	10	on Swing drier
3	5	5	10	10	#2 Run 1115-1220
4	10	5	5	5	Photo @ 1217
5	10	5	5	10	
6	5	10	5	10	
7	5	10	15	25	Flushed swing
8	20	25	25	15	E-Tube @ 1220-
9	10	15	15	10	1225
10	10	10	10	10	
11	10	10	10	10	
12	10	10	10	10	
13	10	15	10	5	
14	10	10	10	10	
15	5	5	5	5	
16	10	5	5	5	
17	5	5	10	5	
18	10	5	10	5	
19	5	10	5	5	
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25	10	10	5	5	
26	5	5	5	5	
27	5	5	10	5	
28	5	5	5	5	
29	10	10	10	5	
30	5	5	5	5	- Photo @ 1248

OBSERVER'S NAME (PRINT): Robert Clarke
OBSERVER'S SIGNATURE: Robert Clark | DATE: 9/12/90
ORGANIZATION: North Coast Unified AQMD
CERTIFIED BY: California Air Resources Board | DATE: 9/5/90

ADDITIONAL INFORMATION

CONTINUED ON VEO FORM NUMBER

F047

REGIONAL WATER QUALITY CONTROL BOARD

INTERNAL MEMO

TO: Frank Reichmuth
File

FROM: Mark Alpert MJA

DATE: June 29, 1990

SUBJECT: Louisiana-Pacific (LP) Humboldt Particleboard Plant

On June 29, 1990 by telephone I requested Liz Smith, Environmental Manager for LP, to submit Formaldehyde test results for April 1990, which were late. She indicated they had received the results late and would send them to us immediately. The results were apparently non-detect.

Ms. Smith will also send the test results of the 1600 cubic yards of material excavated from the pond. Her letter to us dated May 7, 1990, indicated the results were attached, but we didn't receive them.

The new air equipment is on line and working very well (although not completely finished). Apparently, filters are so much more efficient at removing entrained particles, early in the process than previously, that the volume of sludge produced is a fraction of what it used to be. Also as soon as they complete all the installation work they will install a skimmer to help remove material from entering the sump and repave the area behind the mill.

We also discussed the NPDES permit renewal for the mill. Ms. Smith indicated that since there will probably be no storm runoff until the fall or later that they will not be able to sample in a timely manner to meet our August 1 submittal request, and perhaps the Jan. 30, 1991 permit expiration. She asked how they should handle this, perhaps by requesting an extension? I told her I would check with management and get back to her.

MJA: LPSMITH.MEM

What we have done in the past is accept the Report of Waste Discharge pending submittal of stormwater runoff data. We can go ahead and schedule the permit adoption for Jan. 1991. If the data comes in after adopt of WDRs and requires a change in the permit, we can revise permit for cause for a later Reg. Board. meeting. (AL)
We told Liz @ 7/17 meeting

Louisiana-Pacific Corporation

Western Division

P.O. Box 158, LP Drive
Samoa (Humboldt County), California 95564
707 / 443-7511

August 25, 1988

Mr. Mark Harvey
North Coast Regional
Water Quality Control Board
1440 Guerneville Road
Santa Rosa, CA 95403

Dear Mr. Harvey:

This is in response to your letter of July 27, 1988 to Mr. Kelly Stalker, requesting a report of washing procedures and of future measures to prevent wash waters from being discharged to the abandoned log pond behind the Humboldt Flakeboard Plant in Arcata.

Washing down of the roof area and the furnish drying equipment in the southeast corner of the plant is done as a fire prevention measure. A large portion of the material that collects is airborne raw material, and a portion is particulates escaping from an inefficient scrubber air pollution control system.

Steps are being taken at this time to alleviate the insufficient air pollution control equipment problem. We are negotiating with EFB, Inc. for an electrified filter bed system that is guaranteed to control particulates down to 0.1 gr/dscf corrected to 12% CO_2. This equipment is a dry system which incorporates electric charge to remove fine particles from, in this case, wood dryer exhaust gases. A polarized bed of basaltic gravel flowing in a continuous stream captures both aerosols and fine dust particles. A bag house dust collection system removes the dust particles from a fresh air stream to an enclosed hopper for transfer to our landfill for disposal, or to be used as fuel for a proposed future fuel synthesis project at our Samoa power complex.

This control equipment is considered Best Available Control Technology (BACT), in Wisconsin, Maine, Idaho and West Virginia on new air emission sources. Louisiana-Pacific Corporation has several of these systems operating in our Northern Division. They operate at or around a 90% collection efficiency.

Ref. #14

We feel that this system will drastically clean up the fugitive fines and dust, as well as air emissions. This will also reduce the number of washings necessary for maintaining fire safety. We realistically expect that the new control equipment could be in place in eight months from this date.

At present, washings occur once per shift (3 shifts per day) and take approximately 20 minutes. This maintenance operation is seasonal. Dust and fines do not collect on the roof and equipment during storm seasons as the wetted material does not become windblown and there is less danger of fire.

A solution to the washdown water discharge to the pond is to install a third pump in the sump and at a lower level than the two existing pumps. When the crews are performing the washdown procedure, the lower level pump will be activated. No storm water will be in the sump. This pump will discharge to the clarifier used for the present air pollution control equipment. The solids will be collected as the other clarifier solids and removed to the city garbage landfill. The additional water will become make-up water for the scrubbers. Any excess water, until the new EFB system is installed, will be discharged to the city sewer. The clarifier will remain after the new pollution control equipment is installed, to serve as a separation and collection system for the wash waters. The third pump will be installed in 2 - 3 weeks.

A crack was discovered in the concrete berm containing the resin tanks. From the location of this crack and difficulty in locating it because of standing water on the outside of the berm, I believe this could be a source of the concentration of phenol and formaldehyde detected at the sump. This situation will be corrected <u>immediately</u>.

Please contact me if you wish to discuss this matter further.

Sincerely,

Liz Smith

Elizabeth Smith
Environmental Department

ES:sd

cc: Art Green

LP Humboldt F lakeboard

WATER QUALITY
CONTROL BOARD
REGION 1

MAY 6 '87

☐ BK ☐ RC
☐ CJ ☐ ~~CAC~~ CAG
☒ FR ☐
☐ RT ☐
☐ JH ☐
☐ BB ☐
☐ JG ☐ REPLY
☐ ALL STAFF ☐ FILE

Louisiana-Pacific Corporation

COASTAL DIVISION

P.O. Box 158, LP Drive
Samoa (Humboldt County), California 95564
707/443-7511

May 4, 1987

Frank Reichmuth
Regional Water Quality Control Board
1440 Guerneville Road
Santa Rosa, CA 95401

Dear Mr. Reichmuth:

Re: **ARCATA FLAKEBOARD LATEX PRIMER/SEALER SPILL**

This letter is to follow up on a report of a sump overflow at the Arcata Flakeboard Plant April 24, 1987.

Kelly Stalker was notified at 8:10 A.M. April 24, 1987 that sometime in the early morning hours that day, a sump pump had clogged and latex primer mixed with cleanout water had overflowed the sump, entering a ditch on the north side of the plant.

Kelly requested that I investigate and insure that all precautions were being taken to minimize any damage. I arrived at the mill at 8:25 A.M. Frank Ghisetti, Plant Millwright, was at the spill. Art Green, Plant Manager, was on his way after being called from a meeting.

The spill was first noticed at 7:30 A.M. by Frank Ghisetti. He immediately turned off a pump that sends the latex/water mixture to the sump (it was not operating at that time), and placed sorbent booms in three locations in the ditch along Arlington Way. Two booms were placed in the ditch on the L-P side of Arlington Way, and one approximately 200 yards beyond the point where the ditch crosses under Arlington Way to the west. Sawdust had been placed on the spill area surrounding the sump to the end of the paved area.

I observed a slight cloudiness in the water immediately after the water exits the culvert under the plant's paved area. A small amount of foam had collected at the first sorbent boom, but it did not have the same buff color as the latex primer. The water in the ditch, after exiting the culvert under Arlington

Ref. #20

Way, had a definite buff color and seemed to pocket in areas along the bank in slow moving water. The point of the third sorbent boom had the most coloration in the water. Art Green and I followed the ditch to the place where it goes under the Highway 101 bridge. There was no trace of the primer at that point.

As I was leaving to return to the office at approximately 9:40 A.M., I checked the ditches again. The cloudiness had disappeared considerably, as the material appeared to be settling rather than dissipating and moving down stream.

No volume of primer material could be accurately estimated, as it is not certain how long the pump sending the water and latex from the cleanout operation in the primer spray machine, had been operating. There is no way to tell the quantity of material in the sump when the pump clogged.

To remedy this situation, a float has been installed that will shut the pump from the spray machine off, and alert the shift maintenance foreman of a problem when the sump is full.

Kelly Stalker called Fish and Game and requested that they go by the plant to determine if any damage had occurred. We have not heard back from that department.

Please feel free to call if you need further clarification.

Sincerely,

Liz Smith

Liz Smith
Environmental Department

LS:sd - Enclosure

cc: Kathy Goodwin

Humboldt County

WATER QUALITY
CONTROL BOARD
REGION 1

JUN 26 '87

☐ BK ☐ RG
☐ GJ ☐ LAG
☐ FR ☐ ____
☐ RT ☐ ____
☐ JH ☐ ____
☐ BB ☐ ____
☐ JG ☐ REPLY
☐ [illegible] ☐ CHRON

SPILL PREVENTION CONTROL

AND

COUNTER MEASURES PLAN

LOUISIANA-PACIFIC CORPORATION

ARCATA, CALIFORNIA

Rev. 11/85

TABLE OF CONTENTS

GENERAL TANK INFORMATION

Potential Sources of Spills

Tank Capacity	Contents	Location
300 Gal.	Gasoline	Main Gate
7,000 Gal.	Latex Sealer	North Side of Plant
20,000 Gal.	Urea-Formaldehyde Resin	East Side of Plant Adjacent to Pond
10,000 Gal. each (6 tanks)	Urea-Formaldehyde Resin, Phenolic Resin or Wax	East Side of Plant North of Dryers

Petroleum products are stored in the shop on the northeast corner of the plant and in the Oil House on the south side of the shop.

Gasoline is located in a 3,000-gallon above-ground tank in a small building just inside and east of the main gate. The tank is contained within a concrete berm.

Latex Sealer is stored in a bermed, roofed tank adjacent to the north side of the plant. The surrounding area is paved and slopes toward the north. A ditch flows east along the north edge of this pavement.

Resins and Wax are stored in six vertical tanks on the east side of the building just to the north of the dryers. The tanks are numbered from east to west with tank number one being closest to the driveway. This tank contains phenolic resin. Tank number two contains urea-formaldehyde resin. The third tank is not numbered and contains wax emulsion. Tank number three (fourth tank) contains urea-formaldehyde resin, while tanks four and five contain phenolic resin. All of these tanks are roofed and contained within a common berm which drains to the east where a pump transfers liquid from the unloading area to the City sewer. Adjacent to the pond dike to the east are two horizontal and one vertical tanks. The horizontal tank on the north is not in use. The center vertical tank contains urea-scavenger resin while the horizontal tank to the south contains urea-formaldehyde resin. These tanks are roofed and bermed. The berms can drain to the sump to the sewer line.

EMERGENCY SPILL RESPONSE

PETROLEUM PRODUCTS

The oil house on the south side of the shop contains a two-tiered rack of 55-gallon drums of lubricating oils and hydraulic fluid. A sheet metal drip pan is located under the spigots from these drums. Any spill would flow east across the pavement out of the building and pass through the oil skimmers that drain the paved pod around the building.

If a spill occurred, it would be necessary to immediately check the capacity of the skimmers to be sure no oil is escaping. The readily available sawdust and shavings could be used to block drainage ways to contain a spill. Sorbent pads from the cabinet in the oil house could be used as needed to remove oil.

All surface runoff flows to one of three automatic sumps which pump rain water into the pond. If necessary, these pumps could be shut down to allow cleanup of oil.

GASOLINE

Gasoline is contained in a steel tank inside of a concrete berm located in a small building just inside the main gate. If a spill occurred, it would be necessary to pump out the gasoline and clean the berm. Should the berm be breached, quick action is imperative. The ditch flowing east along the edge of the pavement should be dammed with dirt from the grassy area to the north or shavings from the storage building to the west. The gasoline could then be pumped out of the ditch or absorbed on the shavings. Due to the extreme danger, the Fire Department should immediately be notified.

LATEX SEALER

The tank of sealer is completely contained within a concrete berm on the paved area and roofed to exclude rain. The sealer is water soluble so quick action would be required if the berm should be breached. However, the latex sealer is nontoxic.

Shavings should be brought from the storage building to construct dikes as necessary. Material from the grassy area just north of the tank could be dug up and used for dikes. Immediately north of the tank at the edge of the ditch a culvert inlet drains back under the pavement. This must immediately be blocked.

The drainage ditch flows east toward the office where it enters a large culvert that flows under the pavement to the ditch on the west side of the building between the railroad tracks. The inlet to this culvert must be blocked with particleboard. If necessary, the ditch between the railroad tracks can be blocked by placing particleboard over the culvert inlet at the south end of the ditch. Should a spill be of such magnitude as to put latex sealer into this ditch, it would be necessary to obtain the services of the pump truck from Samoa or additional pumps which are readily available for rent at R.C. Rents and United Equipment Rentals in Arcata.

RESINS AND WAX

The resin tanks are enclosed within a berm which directs spills to the sump at the truck unloading area. A sump pump at the corner of the building pumps spills to the City of Arcata sewage system. If a tank ruptured it would be necessary to shut down this pump to contain the resin. The spill would then be pumped into the horizontal storage tank which is not in use.

If a significant quantity of resin enters the sewer it is necessary to call the Sewage Treatment Plant to alert them so the biological activity of the treating plant will not be upset.

11/85

TRAINING

Employees are made aware of the potential for spills and the actions required in the event a spill occurs. Procedures are reviewed by supervisors periodically.

EQUIPMENT

Sorbent Oil Pads

Front End Loaders

Shavings, Sawdust

ADDITIONAL PUMPS

R.C. Rents, Arcata, 822-0331

United Equipment Rentals, Arcata, 822-5181

11/85

Louisiana-Pacific Corporation
Western Division

P.O. Box 158, LP Drive
Samoa (Humboldt County), California 95564
707 / 443-7511

April 1, 1991

Belinda J. Peters
ICF Kaiser, Engineers
160 Spear Street, Suite 1380
San Francisco, CA 94105-1535

Re: **LOUISIANA-PACIFIC CORPORATION**
ARCATA PARTICLEBOARD PLANT

Dear Ms Peters:

As you requested during your recent site inspection, I am enclosing additional information regarding our Arcata Particleboard plant. I also came across a note to our file concerning the PCB cleanup that occurred during the same time that a spill was reported by an anonymous informant at the plant.

Included in this packet are MSDS's for the products you requested, a hazardous waste manifest and burn certificate for the 1986 PCB disposal, a list of our permits, laboratory results of the material excavated from the pond and two maps of the plant.

The only information I was unable to obtain is the exact size of the log pond behind the plant. From talking with other L-P personnel, it is approximately ten acres in size.

Please contact me if there is further information you require.

Sincerely,

Elizabeth T. Smith

Elizabeth T. Smith
Environmental Manager

ETS:sd - Attachments

cc: Joe Wheeler, Jr.
Art Green
Bert Krages, Portland

Ref. # 47

ARCATA PARTICLEBOARD PERMITS

WATER

86-002	W.D.R.
CA0023981	NPDES

AIR

HAC-202	Bauer Hog Cyclone
HAC-222	New Drier
HC-191	Carter Day #3
HC-207	Floor Sweep, #17
HC-220	Jeff Hog 2, #6
HC-224	Jeff Hog 1, #21
HC-274	Matt Trim, #25
HC-286	Carter Day #2
HC-289	Upper Line Suck, #28
HC-306	Carter Day #1
HC-348	East Bauer, #30A
HC-349	West Bauer, #30B
HC-350	Pallman Flakers, #32
HC-355	Sprout-Waldron, #31
HC-370	Central Bauer, #30C
HD-221	Dryer #4
HD-222	Dryer #5
HD-028	Steam Generator
HD-231C	E-Tube
HD-232S	E-Tube
HD-233S	E-Tube

Lacquer Thinner

MATERIAL SAFETY DATA SHEET

SAFETY-KLEEN CORP.
777 Big Timber Rd.
Elgin, IL 60120

safety-kleen corp.

IDENTITY (As Used on Label and List)	Note: Blank spaces are not permitted. If any item is not applicable, or no information is available, the space must be marked to indicate that.
Safety-Kleen Lacquer Thinner	

Section I Part #6782

Manufacturer's Name Safety-Kleen Corp.	Emergency Telephone Number 312/697-8460
Address (Number, Street, City, State, and ZIP Code) 777 Big Timber Road	Telephone Number for Information 312/697-8460
Elgin, Illinois 60120	Date Prepared 12/13/85, Revised 1-16-86
	Signature of Preparer (optional)

Section II — Hazardous Ingredients/Identity Information

Hazardous Components (Specific Chemical Identity; Common Name(s))	OSHA PEL	ACGIH TLV	Other Limits Recommended	% (optional)
Toluene	200 ppm	100 ppm	-	-
Xylene	100 ppm	100 ppm	-	
Methyl Ethyl Ketone	200 ppm	200 ppm	-	
Methyl Iso Butyl Ketone	100 ppm	50 ppm	-	
Acetone	1000 ppm	750 ppm	-	
Isopropanol	400 ppm	400 ppm	-	
Methanol	200 ppm	200 ppm	-	
Ethanol	1000 ppm	1000 ppm	-	
Normal Butyl Acetate	150 ppm	150 ppm	-	
Iso Butyl Acetate	200 ppm	200 ppm	-	

Section III — Physical/Chemical Characteristics

Boiling Point	131-347°F.	Specific Gravity (H_2O = 1)	~0.840
Vapor Pressure (mm Hg.) @ 68°F.	185	Melting Point	N/A
Vapor Density (AIR = 1)	2.0	Evaporation Rate (Ether = 1)	slower than ether

Solubility in Water
Appreciable.

Appearance and Odor
Clear colorless liquid with characteristic solvent odor.

Section IV — Fire and Explosion Hazard Data

Lower Explosion level 1.1%

Flash Point (Method Used)	Flammable Limits	LEL	UEL
<20°F. TCC		1.1	12.8

Extinguishing Media
CO_2, foam, dry chemical, water (mist only)

Special Fire Fighting Procedures
Liquid water may be used to cool containers and firefighters. However, due to differences in specific gravity, water could cause the free solvent to float and spread a fire.

Unusual Fire and Explosion Hazards
Flammable liquid. All of the above listed components are Class 1B which is defined as material with a flash point below 73°F. and a boiling point above 100°F.

Ref. #48

Safety-Kleen Lacquer Thinner

P/N 6782

Section V — Reactivity Data

Stability			Conditions to Avoid
	Unstable		
	Stable	X	Heat, sparks, flame and fire.

Incompatibility (Materials to Avoid)
Strong oxidizing agents.

Hazardous Decomposition or Byproducts
Normally none; however, incomplete burning may yield carbon monoxide.

Hazardous Polymerization			Conditions to Avoid
	May Occur		
	Will Not Occur	X	

Section VI — Health Hazard Data

Routes(s) of Entry: Inhalation? yes Skin? yes Ingestion? yes

Health Hazards (Acute and Chronic)
Skin - Can cause drying of skin. Eyes - Severe irritant. Inhalation - Excessive inhalation can cause headache, dizziness and nausea. Ingestion - Harmful or fatal if swallowed.

Carcinogenicity: NTP? no IARC Monographs? no OSHA Regulated? no

None of the ingredients are known or suspected carcinogens.

Signs and Symptoms of Exposure
Drying of skin, eye irritation, headache, dizziness, and nausea.

Medical Conditions
Generally Aggravated by Exposure Unknown.

Emergency and First Aid Procedures
Skin - Wash with soap and water. Eyes - Irrigate with water. Inhalation - Remove to fresh air source and call a physician. Ingestion - DO NOT INDUCE VOMITING. Call a physician.

Section VII — Precautions for Safe Handling and Use

Steps to Be Taken in Case Material is Released or Spilled
Catch and collect for recovery as soon as possible. Avoid exposure to sparks, fire, flame, hot surfaces.

Waste Disposal Method
Dispose of in accordance with company, local, state and federal regulations.

Precautions to Be Taken in Handling and Storing
Flammable liquid. Keep away from heat, sparks, flame. Use with adequate ventilation. Avoid long and repeated contact with skin. If clothes are inadvertently saturated with solvent remove them as soon as possible - DO NOT SMOKE - Keep away from ignition sources. Keep out of reach of children.

Section VIII — Control Measures

Respiratory Protection (Specify Type)
Respirator as recommended by NIOSH for concentrations above TLV limits.

Ventilation		
	Local Exhaust Sufficient to keep concentration below lowest TLV.	Special None.
	Mechanical (General) None.	Other None.

Protective Gloves In cases of prolonged contact, wear rubber gloves. Eye Protection Yes - eyeglasses, safety glasses.

Other Protective Clothing or Equipment
N/A

Work/Hygienic Practices
Do not smoke while using this solvent. Wash hands thoroughly after use and before eating.

STATE OF CALIFORNIA

CONTROL BOARD
REGION 1

REGIONAL WATER QUALITY CONTROL BOARD
DEPARTMENT OF HEALTH SERVICES
SOLID WASTE MANAGEMENT BOARD
DEPARTMENT OF FORESTRY

OCT 11 '90

APPLICATION FOR FACILITY PERMIT/WASTE DISCHARGE

This form is to be used for filing a/an: (check all appropriate)

1. [X] **REPORT OF WASTE DISCHARGE** (pursuant to Division 7 of the State Water Code)
2. [ ] **APPLICATION FOR A HAZARDOUS WASTE FACILITY PERMIT** (pursuant to Health and Safety Code Section 25200)
3. [ ] **APPLICATION FOR A SOLID WASTE FACILITIES PERMIT** (pursuant to Government Code Section 66796.30)
4. [ ] **APPLICATION FOR A RUBBISH DUMP PERMIT** (pursuant to Public Resources Code Sections 4371–4375 and 4438)

FOR OFFICE USE ONLY

Form 200 Rec'd _____
Fee (RWQCB) _____ (SWMB) _____
Letter to Discharger _____
Report Rec'd _____
Effective Date _____
CDF Notified _____
DOHS No. _____
SWMB No. _____

I. FACILITY

A. NAME OF FACILITY: ARCATA PARTICLEBOARD
TELEPHONE #: (707) 822-5961
ADDRESS: 4700 West End Road, Arcata, California
ZIP CODE: 95521

B. NAME OF LEGAL OWNER OF FACILITY: LOUISIANA-PACIFIC CORPORATION
TELEPHONE #: (503) 221-0800
ADDRESS: 111 S. W. Fifth Avenue, Portland, Oregon
ZIP CODE: 97204

C. NAME OF BUSINESS OPERATING FACILITY: LOUISIANA-PACIFIC CORPORATION
TELEPHONE #: (707) 443-7511
ADDRESS: P. O. Box 158, Samoa, California
ZIP CODE: 95564

D. TYPE OF BUSINESS OPERATING FACILITY

[ ] Sole Proprietorship [ ] Partnership [X] Corporation [ ] Government Agency

E. NAME OF OWNER(S) OF BUSINESS OPERATING FACILITY: LOUISIANA-PACIFIC CORPORATION
TELEPHONE #: (503) 221-0800
ADDRESS WHERE LEGAL NOTICE MAY BE SERVED: 111 S. W. Fifth Avenue, Portland, Oregon
ZIP CODE: 97204

II. REASON FOR FILING

CHECK ALL APPROPRIATE:

A. [ ] New discharge or facility
B. [X] Existing discharge or facility
C. [ ] Increase in quantity of discharge
D. [ ] Change in character of discharge
E. [ ] Change in place or method of disposal
F. [ ] Change in design or operation
G. [ ] Change in business operating facility
H. [ ] Enlargement of existing facility
I. [ ] Other (explain below)

III. TYPE OF OPERATION

CHECK ALL APPROPRIATE:

A. [ ] Transfer station
B. [ ] Solid waste disposal site
C. [ ] Hazardous waste disposal site
D. [ ] Sewage treatment
E. [ ] Industry (on-site disposal facility)
F. [ ] Industry (discharge to sewer)
G. [ ] Woodwaste site
H. [X] Other (explain below) Particleboard manufacturing facility

IV. TYPE OF WASTE

CHECK ALL APPROPRIATE:

A. [ ] Sewage, sewage sludge, and/or septic tank pumpings
B. [ ] Industrial wastes
C. [ ] Municipal solid wastes
D. [ ] Hazardous wastes
E. [ ] Agricultural wastes
F. [ ] Animal wastes
G. [ ] Forest product wastes
H. [ ] Construction/demolition wastes
I. [ ] Inert materials
J. [ ] Dead animals
K. [ ] Tires
L. [X] Other (explain below) stormwater run-off compressor cooling water

V. SITE DESIGN CAPACITY

A. PRESENT POPULATION OR CAPACITY	B. DESIGN POPULATION OR ULTIMATE CAPACITY	C. LIFE EXPECTANCY (YEARS)
N/A	N/A	N/A

VI. QUANTITY OF WASTES

A. PRESENT OR PROPOSED DAILY FLOW (IN MGD):	MAXIMUM	AVERAGE	B. DESIGN FLOW (IN MGD)
	1.2 mgd	.10 mgd	

C. SOLID WASTE DISPOSAL SITE (IN TONS OR CUBIC YARDS):	DAILY QUANTITY	TOTAL IN PLACE QUANTITY	D. AREA IN WHICH SOIL WILL BE DISTURBED (IN ACRES)	TOTAL SITE AREA

VII. LOCATION OF POINT OF DISPOSAL OR OPERATION

(DESIGN AND ATTACH MAP, SKETCH, OR LOCATION ON U.S.G.S. QUADRANGLE MAP, 7.5 OR 15 MINUTE SERIES.)
LIST DISTANCES OR BEARING AND DISTANCE FROM SECTION CORNER OR QUARTER CORNER, SECTION, TOWNSHIP, RANGE, BASE AND MERIDIAN:

VIII. SOURCE OF WATER SUPPLY (CHECK ALL APPROPRIATE)

A. [X] MUNICIPAL OR UTILITY SERVICE:

NAME OF WATER PURVEYOR
Humboldt Bay Municipal Water District

ADDRESS OF PURVEYOR
828 Seventh Street

Eureka, California 95501

B. [X] INDIVIDUAL (Wells)

C. [ ] SURFACE SUPPLY

NAME OF STREAM, LAKE, SPRING, ETC. (IF NAMED)

TYPE OF WATER RIGHTS
[X] Riparian [ ] Appropriation

WATER RIGHTS PERMIT OR LICENSE #

IX. ENVIRONMENTAL IMPACT REPORT (EIR)

Has an EIR been prepared for this project? [ ] Yes [X] No
If "Yes", please enclose a copy.
If "No", will an EIR be prepared? [ ] Yes [X] No
Will a negative declaration be prepared? [ ] Yes [X] No
If "Yes", please answer the following:

WHO WILL PREPARE THE NEGATIVE DECLARATION?

APPROX. DATE OF COMPLETION

CERTIFICATION

I hereby certify under penalty of perjury that the information provided in this application and in any attachments is true and accurate to the best of my knowledge.

SIGNATURE OF OWNER OF FACILITY		SIGNATURE OF OPERATOR OF FACILITY	
PRINTED OR TYPED NAME: LEE C. SIMPSON		PRINTED OR TYPED NAME: ELIZABETH T. SMITH	
TITLE: Vice-President/Operations	DATE: 9-6-90	TITLE: Environmental Manager	DATE: 10/8/90

LIST TITLES OF ANY ATTACHMENTS:

You will be notified of the correctness of filing fee and submittal of any additional information deemed necessary to complete your Report of Waste Discharge pursuant to Division 7, Section 13260 of the State Water Code, or to complete your permit application pursuant to Government Code Section 66796.30 and Health and Safety Code Section 26200.

REGIONAL WATER QUALITY CONTROL BOARD

INTERNAL MEMO

TO: Frank Reichmuth
File

FROM: Mark Alpert

DATE: October 16, 1990

SUBJECT: Compliance Inspection Louisiana-Pacific (LP) Humboldt Particleboard Plant

On September 26, 1990, I performed a compliance inspection of the subject facility. I was met at the site by Plant Manager Art Green. The day was clear and warm. The plant is running at "full steam" since completion of the new air emissions control equipment. Discharge to the pond was not observed which is typical for this time of year. No violations were noted. I made the following observations:

1. A cement berm is being constructed adjacent to the new scrubber equipment. Its purpose is to keep any wash water draining out of the system from mixing with runoff from the rest of the mill yard. The berm drains to a new sump which would be pumped into the City sewer system. Normally the wash water in the blowdown equipment is recycled. However, if there is a system shutdown, for example, when electricity is cutoff, the system may drain and flood the yard area behind the plant. They are also repaving the yard in this area. The existing sump will continue to collect the yard runoff. During low flows this is also pumped to the sewer. When runoff increases the sump is ~~also~~ discharged to the pond.

2. A new shed has been constructed to protect the oil drum storage area. Unfortunately, this is within a few feet of an oil skimmer leading to a storm drain. Due to its proximity to the oil shed, it appears the skimmer could easily be overloaded in the event of a significant spill. To prevent this, I suggested that a small berm be placed in front of the shed, so that a small spill would pool and be easier to clean up. Mr. Green was going to look into this suggestion.

3. The area that serves as a collection area for the main drainages in front of the plant near West End Road should be cleaned out. The remainder of the perimeter drainage system looked good.

4. Workers were beginning work to install new vents on the particle storage buildings. These are designed to equalize the pressure inside the building and reduce the amount of fine particles lost through the large doors.

Mark J. Alpert

Mark J. Alpert
Associate Engineering-Geologist

C to WTR

REGIONAL WATER QUALITY CONTROL BOARD

INTERNAL MEMO

TO: Frank Reichmuth → Q1 ;JT
File

FROM: Mark Alpert

DATE: October 16, 1990

SUBJECT: Status of Louisiana-Pacific Humboldt Particleboard Plant

A major producer of particleboard, the LP plant is located near the junction of Hwy 101 and 299 north of Arcata. The Bob Britt sawmill and the former Coombs lumber sawmills are neighbors. Three shifts run the plant 24 hrs per day. Art Green is the plant manager, and Liz Smith is the environmental coordinator. Due primarily to the use of formaldehyde and phenols, the site is rated complexity A, threat to water quality 1. One of three compliance inspections scheduled for this fiscal year have been completed. No current violations have been identified.

Order No. 86-2 expires Jan 30, 1991. On May 22, we requested a new RWD to be submitted by August 1. We received a RWD, and $1000 filing fee on October 11, 1990. Required testing of the pond will not be possible until a discharge from the pond has occurred, sometime this winter. Tentative WDR should be scheduled for Regional Board agenda as soon as possible.

In the past, low concentrations of formaldehyde have been detected in samples taken from the pond, behind the plant. One possible source is from surface runoff from the plant yard. Surface runoff from the plant is collected in a sump that has low and high pump stages. Under low flow conditions, runoff is pumped to the City sewer. When the flow level in the sump gets higher, runoff is then pumped to the pond. Wood flakes and debris contained in the discharge has accumulated in the pond. In spring 1990, approximately 1600 cubic yards was removed from the pond.

This summer the plant installed new air emissions equipment. The elimination of wood particulate should also reduce past water quality problems. A new cement berm is being constructed adjacent to the new scrubber equipment. Its purpose is to keep any wash water draining out of the system from mixing with surface runoff from the rest of the plant yard. The berm drains to a new sump which will be pumped into the City sewer system. Normally the wash water in the blowdown equipment is recycled. However, if there is a system shutdown, for example, when electricity is cutoff, the system may drain and flood the yard area behind the plant. They are also repaving the yard in this area. Apparently, the volume of sludge generated, and landfilled, is a fraction of what it used to be, due to efficiency of the emissions equipment at removing entrained particles.

Mark J. Alpert

Mark J. Alpert
Associate Engineering-Geologist

State of California
Regional Water Quality Control Board
North Coast Region

EXECUTIVE OFFICER'S SUMMARY REPORT
September 15, 1977, 9:00 a.m.
Rohnert Park City Council Chambers
6750 Commerce Blvd.
Rohnert Park, CA

ITEM: 4

SUBJECT: Cease and Desist Order for Simpson Timber Company, Mad River Plywood and Louisiana-Pacific Corporation, Humboldt Flakeboard

DISCUSSION:

I. INTRODUCTION

An order to "cease and desist" under the provisions of the Porter-Cologne Water Quality Control Act is a formal "directive" that a discharger (1) cease violating or threatening to violate his waste discharge requirements; that he (2) cease causing pollution or nuisance problems; that he (3) comply with the terms of his waste discharge requirements in the most expeditious and timely manner; and, in the interim time necessary to achieve full compliance, that he (4) take all necessary steps to prevent further violation of his requirements and even more serious pollution and nuisance problems.

In simplest terms, a cease and desist order requires that the discharger stop violating requirements in accordance with a specific, though reasonable, timetable and that all possible steps be taken immediately to ensure that pollution problems will get no worse before they are completely corrected.

Failure to comply with the terms of a regional board cease and desist order, including time schedules, sets into motion a referral of the entire matter to the Attorney General and his potential request that the Superior Court invoke such monetary and other punitive actions that are authorized under the Porter-Cologne Act.

Under the Porter-Cologne Act, a cease and desist order should be issued by a regional board whenever significant violations of requirements have occurred, threaten to occur, and are likely to continue.

In the case of Simpson Timber Company, Mad River Plywood, and Louisiana-Pacific Corporation, Humboldt Flakeboard, violations of waste discharge requirements have been repeatedly documented by staff inspections. Further, standards which become operative in the near future will probably be violated.

II. PHYSICAL SETTING

The Mad River Plywood-Humboldt Flakeboard complex is located about a half mile east of the junction of Highways 101 and 299, and a mile and one-quarter north-

Rf # 4

east of the town of Arcata (Figure 1). Both mills are situated adjacent to a man-made log pond of about 30 surface acres (Figure 2). The log pond discharges continuously to Janes Creek, a tributary of Humboldt Bay. The mills are located about 2 1/2 miles north northeast of the confluence of Janes Creek with Humboldt Bay.

Janes Creek has important and sensitive beneficial uses, including fish and wildlife, fish spawning, cold freshwater habitat, and wildlife habitat; water contact and nonwater contact recreation; and agricultural water supply.

Both mills have discharged a variety of wastes to the log pond. These include waste glues, waste formaldehyde and urea resins, boiler blowdown, and chlorinated septic tank effluent. The pond also contains many years' accumulation of decomposing bark and wood debris which has washed off of the floating logs.

III. WASTE DISCHARGE REQUIREMENTS, VIOLATIONS AND THREATENED VIOLATIONS

Order No. 76-31 (NPDES Permit Nos. CA 0005916 and CA 0023981), adopting waste discharge requirements for Simpson Timber Company and Louisiana-Pacific Corporation, were issued on March 25, 1976. Included within that Order are Plant Effluent Limitations and Receiving Water Limitations which were to become effective according to a time schedule contained within the Order. The following Plant Effluent Limitations became effective on or before July 30, 1977 and are currently being violated by Simpson Timber Company and Louisiana-Pacific Corporation.

Louisiana-Pacific Corporation was required to comply with the following Plant Effluent Limitations which were effective on or before July 30, 1977:

A.1. The discharge of boiler blowdown to the log pond is prohibited.

A.3. The discharge of glue, resins, and other phenolic compounds to the log pond is prohibited.

A.4. The discharge of oil and grease in excess of 15 mg/l to the log pond is prohibited.

A.6. The discharge of process wastewater pollutants to the log pond is prohibited.

A.7. The discharge of domestic waste to the log pond is prohibited.

Simpson Timber Company was required to comply with the following Plant Effluent Limitations which were effective on or before July 30, 1977:

A.2. The discharge of boiler blowdown to the log pond is prohibited.

A.4. The discharge of oil and grease in excess of 15 mg/l to the log pond is prohibited.

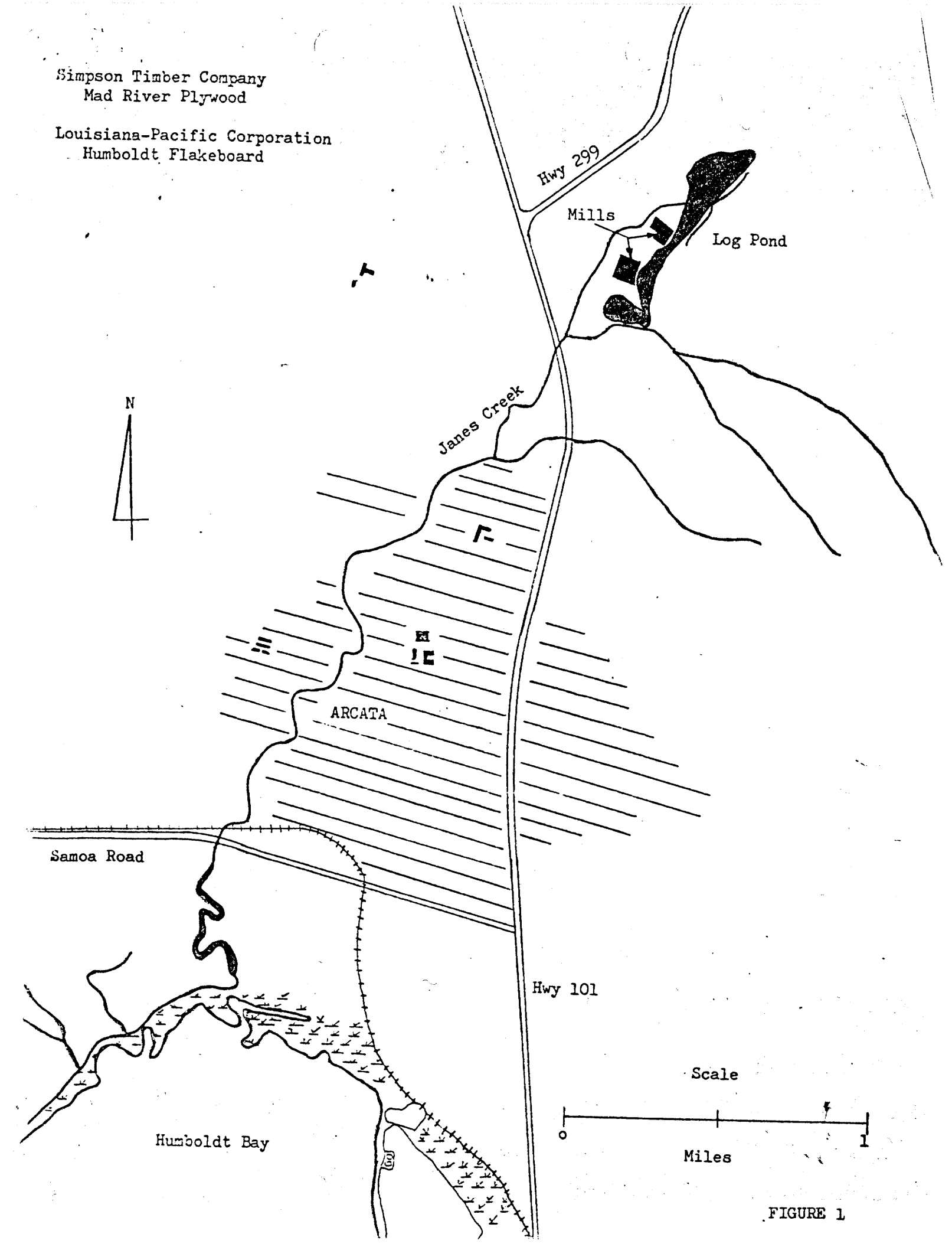
Simpson Timber Company
Mad River Plywood
Louisiana-Pacific Corporation
Humboldt Flakeboard
Hwy 299
Mills
Log Pond
N
Janes Creek
ARCATA
Samoa Road
Hwy 101
Humboldt Bay
Scale
0
1
Miles

FIGURE 1

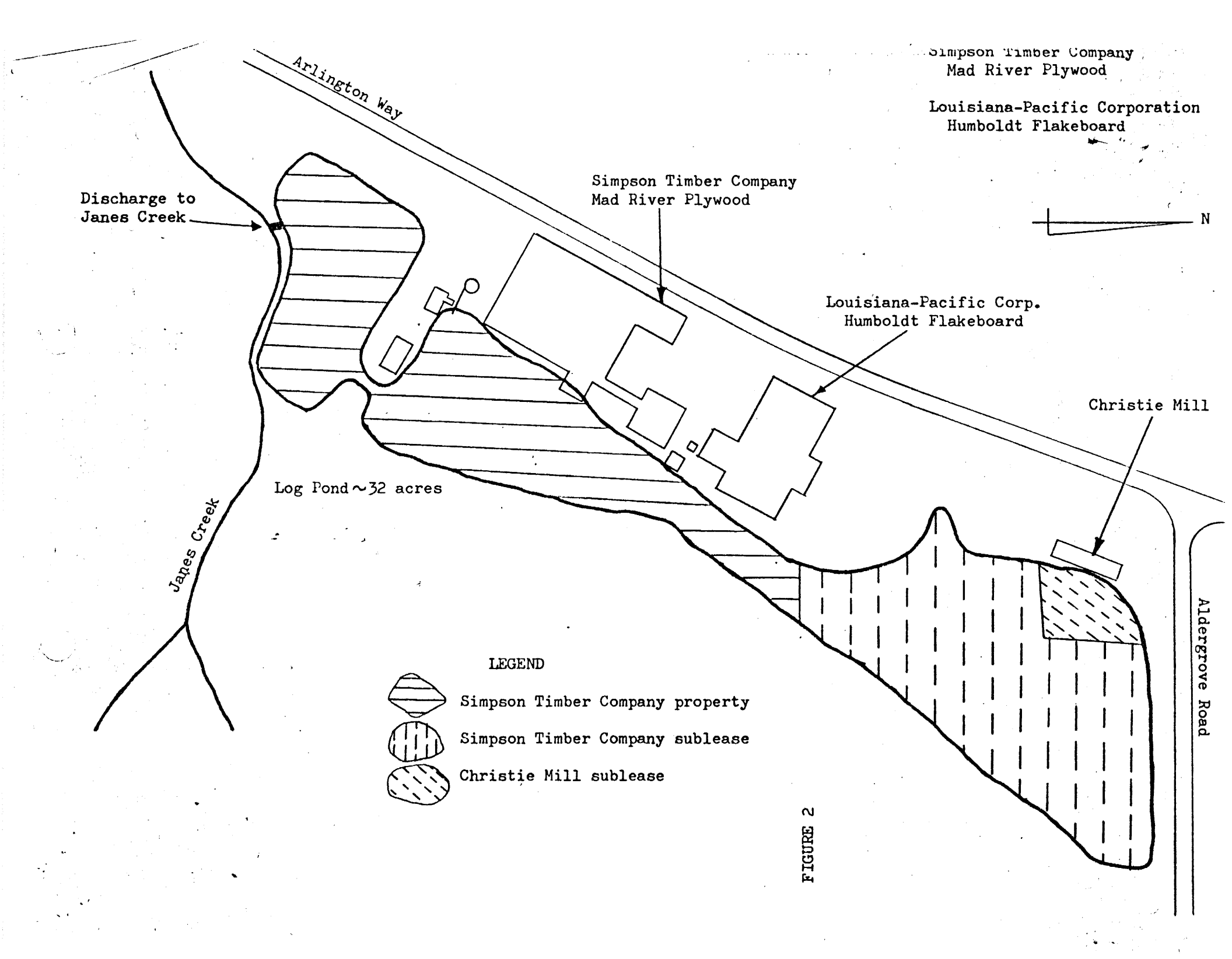
Arlington Way
Simpson Timber Company
Mad River Plywood
Louisiana-Pacific Corporation
Humboldt Flakeboard
Discharge to
Janes Creek
Simpson Timber Company
Mad River Plywood
N
Louisiana-Pacific Corp.
Humboldt Flakeboard
Christie Mill
Log Pond ~32 acres
Janes Creek
Aldergrove Road
LEGEND
Simpson Timber Company property
Simpson Timber Company sublease
Christie Mill sublease

FIGURE 2

A.5. The discharge of process wastewater pollutants to the log pond is prohibited.

A.6. The discharge of domestic waste to the log pond is prohibited.

In order to comply with these Plant Effluent Limitations, Simpson Timber Company and Louisiana-Pacific Corporation have been negotiating a construction contract with the City of Arcata to convey the wastes from the plywood and flakeboard plants to the wastewater treatment facility of the City of Arcata. The Regional Board staff was assured by the dischargers that the contract would be consummated in time to allow the construction of the sewer line by the Fall of 1977 before the winter season. However, on August 16, 1977, Simpson Timber Company requested an extension of this time schedule to August 30, 1978 to allow completion of a financial analysis of the Mad River Plywood Plant and construction of the sewer line provided the financial analysis is favorable to allow the continued operation of the plywood plant.

In addition to the Plant Effluent Limitations, Simpson Timber Company is currently required to comply with Receiving Water Limitations B.7, B.11, and B.16 and must comply with Receiving Water Limitation B.2 by January 1, 1978. These limitations are enumerated as follows:

B.2. The survival of test fish in 96-hour static bioassays in the undiluted log pond effluent shall for any one determination equal or exceed 70% of the test fish. The average survival for any three or more consecutive determinations over a 21-day period shall equal or exceed 90% of the test fish.

B.7. The waste discharge shall not result in floating material, including solids, liquids, foams, or scum in Janes Creek in concentrations or amounts that cause nuisance or adversely affect beneficial uses.

B.11. The waste discharge shall not result in biostimulatory substances in Janes Creek in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses.

B.16. The waste discharge shall not cause toxic substances to be present in Janes Creek in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.

Staff inspections, surveys, and analyses have shown that violation of the limitations have occurred and threaten to further occur unless measures are taken to insure that the specified pollutants are removed from the waste stream and no longer detrimentally affect Janes Creek.

During February 15-20, April 4-6, and July 26-27, 1977, the Regional Board staff investigated the effects of the log pond overflow on the aquatic biota and water quality of Janes Creek. Investigations included live car bioassays

with steelhead rainbow trout, benthic invertebrate sampling, freshwater algae sampling, water quality monitoring, electroshocking for fish population estimates, discharge measurements, and dissolved oxygen monitoring in Janes Creek. A compilation of the data and test results are contained in a report titled, "The Effects of Simpson Timber Company and Louisiana-Pacific Corporation Log Pond Discharge on the Biota and Water Quality of Janes Creek", which has been forwarded to the Board.

Included in the report is a table of average concentrations of water quality parameters sampled in Janes Creek 20 feet upstream, 100 feet downstream, and in the log pond overflow during the period February 15-20, 1977:

	Upstream	Discharge	Downstream
Fecal coliform	28	14	42
Hexane extractables	< 1	0.6	< 1
Phenols	0.001	0.008	0.004
Formaldehyde	0.05	10.0	5.4
Sulfide	0.03	0.11	0.08
Chemical oxygen demand	13	110	56
Biochemical oxygen demand	1.3	12	6.6
Hydronium ion (pH)	7.5	7.3	7.5
Ammonia-nitrogen	0.04	38	20
Tannin-like substances	1.0	6.4	3.8
Nonfilterable residue	6.6	12	12
Settleable solids	0.02	0.11	0.08

The most striking results of the water quality monitoring are the high concentrations of formaldehyde, ammonia-nitrogen, COD, and tannin-like substances which are being discharged from the log pond. The apparent source of these pollutants is the Louisiana-Pacific Corporation, Humboldt Flakeboard mill which utilizes formaldehyde and urea resins in the process of formulating glue. This source was verified by samples taken from a discharge to the log pond from a sump which collects washdown waters from the Louisiana-Pacific mill. A chemical analysis of these samples revealed a formaldehyde concentration of 210 mg/l, ammonia-nitrogen concentration of 150 mg/l, and a COD of 16,200 mg/l. The wastewater in the sump results from the washdown of formaldehyde and urea resin glue bags at the Louisiana-Pacific mill, along with other miscellaneous mill wastes.

The most recent sampling of the log pond overflow on July 26 and 27, 1977 shows an ammonia-nitrogen concentration of 14 mg/l, formaldehyde concentration of 3.4 mg/l, and a COD of 65 mg/l.

The concentration of tannin-like substances averaged 6.4 mg/l in the log pond discharge in February, 1977. The Department of Fish and Game has determined

the 96-hour LC_{50} for pure tannic acid is 14.7 mg/l. The source of the tannin-like substances in the discharge is probably due to many years' accumulation and decomposition of waste bark and debris which has washed off the floating logs. Though the level of tannin-like substances was not acutely toxic to fish during our survey, it is a source of nutrients which degrade the aquatic biota of Janes Creek.

The acute toxicity of ammonia to fish is discussed in Appendix C in a report to the Regional Board from the Department of Fish and Game, evaluating the fishery resource in relation to the log pond discharge. The toxicity of ammonia to trout is dependent on the amount of unionized ammonia in solution which, in turn, is dependent on the pH and temperature of Janes Creek. The unionized ammonia concentration was calculated to be .217 mg/l in the discharge with a range of .098 mg/l to .148 mg/l in Janes Creek downstream of the discharge on April 5 and 6, 1977. Acute toxicity data for fish indicate that the LC_{50} value for unionized ammonia ranges from .29 mg/l to .89 mg/l, with salmonids being the most sensitive. Even though the concentrations of unionized ammonia in Janes Creek were below the lethal levels during the sample period, either an increase in pH or temperature could result in concentrations toxic to the trout population. For example, an increase of 0.3 pH units or a 10°C increase in temperature would double the amount of unionized ammonia present.

The concentrations of unionized ammonia in Janes Creek are above the maximum limit of 0.02 mg/l as recommended in Water Quality Criteria, 1972. Even though concentrations were not lethal at the time of sampling, slight changes in pH or temperature would create toxic conditions. The 96-hour live car bioassay using steelhead trout on February 16-20 did not result in any fish mortality, however, there was evidence of gill hyperplasia, indicative of chronic ammonia toxicity in the fish observed in the live cars downstream of the discharge (Appendix B of the report).

The electrofishing surveys performed on November 3, 1975, September 1, 1976, April 5, 1977, and July 26, 1977, show a smaller population of cutthroat trout in Janes Creek downstream of the discharge, even though the discharge augments the streamflow and provides more water volume for fish habitat. The log pond discharge was found to be 370,000 gallons per day on April 6, 1977 or equivalent to 37% of the total flow of Janes Creek downstream of the discharge during dry weather flow.

The natural populations of cutthroat trout (Salmo clarkii) observed on April 5, 1977 downstream of the discharge were weak in young-of-the-year age class. More than 75% of the fish upstream of the discharge were young-of-the-year. Less than 50% of the fish downstream were young-of-the-year. The external appearance of fish downstream was a darkening of the body color, slight opaqueness of the eyes, and paleness of the gill filaments. Fish upstream were brightly colored externally, as well as having bright red gill filaments.

The benthic invertebrate sampling in Janes Creek shows a drastic change in density of pollution-tolerant and intolerant species between upstream and downstream stations. The upstream stations contained an average density of 128 organisms/square foot of clean water or pollution-intolerant organisms such as mayflies, caddisflies, stoneflies, riffle beetles, blackflies and

freshwater shrimp. The downstream stations are inhabited by an average density of 1,618 organisms/square foot of pollution-tolerant species such as midges, sludge worms, true bugs, beetles, leeches, snails, and clams. This dramatic change in organism density and species is a classic example of organic pollution.

A similar shift indicative of organic pollution occurs in the density and species of freshwater algae found upstream and downstream of the discharge in Janes Creek. Freshwater algae showed a shift from diatoms at a density of 5-6 organisms/ml upstream, to green alga, euglenids, and protozoans at a density of 160 to 240 organisms/ml downstream. Sphaerotilus natans (sewage fungus) were found in large numbers downstream of the discharge, while no Sphaerotilus natans were found upstream of the discharge. The shift in density and species of freshwater algae is indicative of biostimulation of Janes Creek.

The drastic change in the benthic invertebrates, freshwater algae, and the marked degradation in fish populations downstream of the discharge conclusively show that the log pond discharge violates and threatens to violate the Receiving Water Limitations B.7, B.11, and B.16.

A review of staff analyses and the dischargers' self-monitoring reports shows that the dischargers have not made progress in complying with Receiving Water Limitation B.2 for toxicity which becomes effective by January 1, 1978. Unless substantial changes are made in the next four months, the Simpson Timber Company will be violating the standards as soon as they are effective.

The monthly self-monitoring reports submitted since April 1976 to the present show a continual toxicity problem at the discharge. The following table is a compilation of the bioassay results since April 1976:

Bioassay Percent Survival

	1976	1977
January		Test invalid
February		0
March		0
April	0	0
May	0	--
June	40	
July	0	100
August	--	90/10
September	0	
October	0	
November	0	
December	0	

IV. CONCLUSIONS AND RECOMMENDATIONS

Conclusions

California's Regional Water Quality Control Board and the State Water Resources Control Board have adopted procedures designed to implement the provisions of the Porter-Cologne Water Quality Control Act. Those Administrative Procedures stipulate that a cease and desist order should be issued whenever significant violations of waste discharge requirements or prohibitions are threatened or such violations are occurring or have occurred, and there is a likelihood that the violations will continue in the future.

Previous sections of this report have documented violations of Order No. 76-31 and described why the violations of that Order will continue in the future. Further, this report explained that elements of Order No. 76-31 which become effective January 1, 1978 will probably be violated by the dischargers at that time.

Recommendations

1. The hearing be conducted as noticed, and all evidence regarding this discharge be considered.

2. The Regional Board adopt Cease and Desist Order No. 77-159 for Simpson Timber Company, Mad River Plywood, and Louisiana-Pacific Corporation, Humboldt Flakeboard, which includes:

   a. A time schedule for compliance with those portions of Order No. 76-31 being violated or threatened to be violated;

   b. A requirement for submittal of a conceptual compliance plan describing the methods the dischargers will employ to comply with the Cease and Desist Order; and

   c. A charge to the Executive Officer to refer the dischargers to the Attorney General for civil penalties if the Cease and Desist Order is violated.

EXHIBIT C

6/20/90 from North Coast Unified Air Quality Man. Dist.

STAFF REPORT FOR VARIANCE REQUEST BY LOUISIANA-PACIFIC CORP., ARCATA

1. GENERAL: LP has submitted a request for a variance from the limits for the emissions of particulate matter from their two flake driers. On November 30, 1988, the state ARB tested the surface wood flake drier for determining compliance with the Districts Rule 420 which limits the particulate matter emissions from the two driers at the plant to no more than 40 pound per hour(pph). The test of the surface drier indicated emissions of 45 pph thereby exceeding the permitted limit for the two driers with emissions from only the surface drier. Testing in the past has found the particulate matter emissions from these driers to be as follows:

Core drier -	7.6 to 14.5 pph
Surface drier	12.0 to 24.5 pph
or total of	19.6 to 39.0 pph

depending upon the type of board production.

Current emissions then could be as high as 71.6 pph using the same ratioed increase for the core drier as the surface drier under former maximum rates. Total particulate emissions from the driers then is calculated to be 171 tons for the requested variance period until August 1, 1990 while allowable emissions based upon 40 pph would be 96 tons.

It is expected the increase in emissions is due to differences in test methodology and production increases. Prior tests have measured only the material caught on a heated filter (EPA Method 5) and not the condensible fraction due to the possible formation of false particulate from heavy condensible wood hydrocarbons. The ARB's test method includes both the filter catch and the condensible portion thereby raising the amount reported as particulate. In this case the amount of filter catch the ARB found was about 75% of the total catch which is still higher than prior testing using front half only amounts and may therefore reflect production increase effects. Since a test method is not specified for these sources, the ARB feels their test is a correct method for compliance determination.

2. DRYING PROCESS: The following provides a brief description of the drying process involved at the particleboard plant. Raw material or furnish in the form of sawdust and shavings are fed into the triple pass, rotary driers which are directly heated by hot combustion gases from air injected sanderdust burners. Hot exhaust gases from these driers pass through low pressure drop srubbers prior to passing into the atmosphere. A process flow diagram for the sources at the plant is attached. The drying process involves reducing the moisture content of the furnish from 30-40% down to about 3-5%. Emissions from this drying process consist mainly of wood fines and hydrocarbons which show up visually in the atmosphere as either a brown or blue haze.

Ref # 8

The emissions are very noticeable during calm, clear periods normally during early morning hours.

3. COMPLAINTS: The District normally receives complaints about the visual quality of the air in the area of the plant during the periods noted above. A smaller percentage of complaints are received about wood fines fallout in the Valley West area and the source of this fallout may be from wood material handling and not necessarily the driers. Attached is a summary of complaints for calendar year 1989 to date. Ambient particulate matter emissions have been measured in the past in the Valley West area. Total annual average particulate measured was well below federal and state air quality standards. Daily 24 hour measurements did not exceed federal standards but on two occassions the state standard was exceeded as was the case at the monitoring sites in Arcata and Eureka.

4. PRODUCTION: Production of 3/4" basis particleboard is detailed:

Year	Production Million ft^2	Hours operated	ft^2/hour
1984	56	5040	11,111
1985	70	5424	12,906
1986	86	7872	10,925
1987	100	7896	12,665
1988	110	7872	13,974
1989	120	8232	14,577

As can be seen hourly production has increased over the past few years on an annual average basis. It is difficult to determine how much impact this increase has had on the emissions from the driers, since they were last tested in 1982 at a production rate of 10,110 [redacted] ft^2/hr.

5. PROPOSAL TO CORRECT EMISSIONS: LP Corp. has proposed to install new particulate control equipment on each of their existing wood flake driers including a new third drier to be used for core material. The third drier will be subject to District Authority to Construct permit requirements and all three driers will be limited to a maximum of 40 pph as is currently allowed. The type of control equipment is known as a tubular wet precipitator and is efficient at removing very small particles and fumes. Interestingly in 1981 the District was involved in the sampling of a pilot wet precipitator manufactured by CeilCote and setup on an exhaust flow of a drier at the LP plant. The precipitator was preceded by a packed wet scrubber and this configuration showed a 50-90 % reduction in particulate emissions compared to the scrubber alone. LP Corp. plans to use a unit manufactured by Geoenergy International called the "E-tube". A description of the operation of this unit is attached. Water from the collection device will be clarified and filtered prior to reuse. A schedule of events involving design, fabrication, installation and debugging is attached.

6. INTERIM MEASURES TO MAINTAIN OR REDUCE EMISSIONS: LP plans to maintain the scrubbers used to control particulate emissions from the driers. A decrease in production or drier throughput was considered by LP but rejected due to operating economics. Since the plant is down for maintenance about one day per month, the water spray nozzles in the scrubber and the condition of the water clarifier should be checked for proper operation.

7. STAFF RECOMMENDATIONS: The variance request of Louisiana-Pacific Corporation should be granted with the following conditions:

a. LP Corp. shall supply design details of the "E-Tube" wet precipitator particulate collection control equipment in an Authority to Construct application to be filed with the District prior to the installation of such equipment,

b. LP Corp. shall install and continuously operate effective August 1, 1990 or sooner, "E-Tube" wet precipitator particulate control equipment on each wood furnish drier at its Arcata particleboard manufacturing plant,

c. Routine inspection and maintenance of the existing scrubber and clarifier will be performed on a monthly basis or more often if needed and a log shall be kept which identifies the date of inspection, problems found, and equipment maintenance performed. During the term of the variance, LP Corp. shall increase the use of fresh water makeup water to the wet scrubbers to improve its particulate matter removal efficiency,

d. LP Corp. shall perform within 30 days of the issuance of the variance particulate matter, oxides of nitrogen, carbon monoxide stack and nonmethane hydrocarbon emissions tests from the existing drier control systems by a state ARB certified testing contractor according to state ARB reference methods for stack tests under current operating conditions, and the results of such tests be certified by the engineer of the laboratory reporting on such tests and be forwarded to the District's Air Pollution Control Officer. A pretest plan shall be forwarded to the District for approval prior to the testing,

e. If the combined driers' particulate emissions test results under current operation exceed 71 pph, it is recommended that production rates be reduced to the levels that existed at the time the last test was performed(11/2/88).

EMISSIONS CHARACTERISTICS

1. CURRENT EMISSIONS:

The emissions from wood flake driers consists mainly of particulate matter composed of dried wood fines and carbonized wood fines, and various hydrocarbons derived from the wood which contains tar and pitch. Particulate matter emissions and condensible hydrocarbons from the driers are controlled with the use of low pressure drop scrubbers. The efficiency of the scrubber has never been exactly determined but is estimated at 50% to 90 % for particulates including condensible hydrocarbons based upon its condensing design style. Emissions of particulate from the driers is estimated at 280 tons per year based upon current emission levels. During the period of the variance request emissions are estimated to be 171 tons compared to the allowable limits of 96 tons. There has not been any testing to determine particle sizing but particle sizes emitted past a scrubber if working properly will normally be mostly in less than 10 micron range.

2. EMISSIONS WITH NEW CONTROLS:

LP will be installing wet electrostatic precipitators for removal of particulate and hydrocarbons. Data indicates particulate (including condensible hydrocarbons) removal efficiencies in the 90 to 98% area. Its is expected that particulate not removed will be mostly less than 10 microns. The District would expect total particulate emissions to be in the range of 80 tons per year(20 pph) with all three driers operating compared to the current 280 tons per year from the existing two driers.

CHRONOLOGY OF EVENTS

November 2, 1988	While the State Air Resources Board was making compliance inspections of various District facilities, the district requested the state perform testing on driers at the LP, Flakeboard plant for compliance purposes.
November 30, 1988	State ARB performed particulate tests on the LP Flakeboard #5 surface drier.
March 28, 1989	Results of tests performed by ARB received by the District. Particulate levels greater than the allowable levels of 40 pph for both driers.
April 7, 1989	Letter to ARB about test method and inclusion of backhalf condensable hydrocarbons.
April 20, 1989	Letter from ARB concerning test method and legal use of ARB method 5 which allows inclusion of backhalf catch.
May 12, 1989	Letter to Louisiana-Pacific Corp. regarding violation and issuance of NOV #774.
May 26, 1989	Letter from Louisiana-Pacific Corp. requesting a variance from the limits of particulate emissions from their driers. Indicated that new controls would be installed as the project had been approved by management; details however were not available.
June 1, 1989	Letter from LP regarding schedule for engineering drawings, and purchase orders for EFB control system.
June 2, 1989	Letter to LP with application for authority to construct new third drier.
June 26, 1989	Letter to LP regarding the allowable particulate emission limits for their flakeboard plant driers.
September 1, 1989	Letter to LP requesting additional information and an updated variance application.
October 30, 1989	Revised variance application received from LP for their flakeboard driers. New control system proposed, "E-Tube" instead of EFB system.
November 12, 1989	Public Notice in Times Standard for December 14, 1989 Hearing Board meeting concerning LP variance request.

California Regional Water Quality Control Board
North Coast Region

DOCUMENT SOURCE
_____ DOHS
__✓__ RWQCB
_____ OTHER
DATE 6/26/90

ORDER NO. 86-2
ID NO. 1B810050HUM
NPDES NO. CA0023981

WASTE DISCHARGE REQUIREMENTS

FOR

LOUISIANA-PACIFIC CORPORATION
HUMBOLDT FLAKEBOARD
P.O. BOX 158
SAMOA, CA 95564

Humboldt County

The California Regional Water Quality Control Board, North Coast Region (hereinafter Board) finds that:

1. Louisiana-Pacific Corporation (hereinafter discharger) submitted a Report of Waste Discharge dated November 18, 1985.

2. The discharger operates a particleboard plant in Arcata adjacent to a 20 acre pond/marsh system which overflows to a ditch tributary to Janes Creek, a tributary of Humboldt Bay. The discharge from the pond/marsh is located at latitude 40°53'51" north, longitude 124°04'22" east (Figure 1).

3. Urea-formaldehyde and phenolic resins are used as adhesives in the manufacture of particleboard. Stormwater runoff comes into contact with particleboard fines and sanderdust that escapes from the air pollution control systems, resulting in variable concentrations of ammonia, formaldehyde and phenol in runoff. Stormwater runoff is discharged to the pond/marsh system.

4. Noncontact cooling water from the plant air compressor is discharged to the pond at a rate of 0.014 mgd.

5. The pond/marsh overflows intermittently to the drainage ditch. Overflows occur predominantly in the winter months. The pond/marsh overflow may vary depending on the intensity of the storm events.

6. Approximately 0.15 mgd of noncontact cooling water from the particleboard press is discharged to the drainage ditch. The pipe outlet for the cooling water is located adjacent to the pond overflow.

7. The following wastewaters generated by the discharger are considered process wastewater pollutants:

   a. domestic waste
   b. boiler blowdown
   c. washwaters containing urea, formaldehyde, phenol, latex sealer and other glue wastes
   d. effluent from the clarifier for the wet scrubber for air pollution control.

Ref. #22

Constituent	Units	Maximum
BOD (20^{o}, 5-day)	mg/l	30
Nonfilterable Residue	mg/l	30
Settleable Solids	ml/l	0.1
Hydrogen Ion	pH	Not less than 6.0 nor greater than 9.0

2. The survival of test fish in a 96-hour static or in-situ bioassay in undiluted pond/marsh effluent shall average 90 percent with no one determination less than 70 percent.

3. The cooling water discharge shall contain no pollutants except waste heat.

C. RECEIVING WATER LIMITATIONS:

1. The waste discharge shall not cause the dissolved oxygen concentration of the receiving waters to be depressed below 7.0 mg/l. In the event that the receiving waters are determined to have a dissolved oxygen concentration of less than 7.0 mg/l, the discharge shall not depress the dissolved oxygen concentration below the existing level.

2. The discharge shall not cause the pH of the receiving waters to be depressed below 6.5 nor raised above 8.5. Within this range the discharge shall not cause the pH of the receiving waters to be changed at any time more than 0.5 units from that which occurs naturally.

3. The discharge shall not cause the receiving waters to contain toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.

4. The discharge shall not cause the receiving waters to contain oils, greases, waxes, or other materials in concentrations that result in a visible film or coating on the surface of the water or on objects in the water, that cause nuisance, or that otherwise adversely affect beneficial uses.

5. The discharge shall not cause the turbidity of the receiving waters to be increased more than 20 percent above naturally occurring background levels.

6. The discharge shall not cause the receiving waters to contain floating materials, including solids, liquids, foams, and scum, in concentrations that cause nuisance or adversely affect beneficial uses.

7. The discharge shall not cause the receiving waters to contain taste or odor-producing substances in concentrations that impart undesirable tastes or odors to fish flesh or other edible products of aquatic origin, that cause nuisance, or that adversely affect beneficial uses.

5. The discharger shall submit to the Board by January 30 of each year an annual summary of the quantities of all chemicals, listed by both trade and chemical names, which are used for cooling and/or boiler water treatment and which are discharged. A manufacturer's safety data sheet for each chemical shall accompany the report.

6. The discharger shall file with the Board a Report of Waste Discharge at least 120 days before making any material change or proposed change in the character, location or volume of the discharge.

7. The requirements prescribed herein do not authorize the commission of any act causing injury to the property of another, nor protect the discharger from his liabilities under Federal, State, or local laws, nor guarantee the discharger a capacity right in the receiving waters.

8. The discharger shall permit the Regional Board:

   a. entry upon premises in which an effluent source is located or in which any required records are kept;
   b. access to copy any records required to be kept under terms and conditions of this Order;
   c. inspection of monitoring equipment or records; and
   d. sampling of any discharge.

9. All discharges authorized by this Order shall be consistent with the terms and conditions of this Order. The discharge of any pollutant more frequently than or at a level in excess of that identified and authorized by this Order shall constitute a violation of the terms and conditions of this Order.

10. The discharger shall maintain in good working order and operate as efficiently as possible any facility or control system installed by the discharger to achieve compliance with the waste discharge requirements.

11. Collected screenings, sludges, and other solids removed from liquid wastes shall be disposed of at a legal point of disposal, and in accordance with the provisions of Division 7.5 of the California Water Code. For the purpose of this requirement, a legal point of disposal is defined as one for which waste discharge requirements have been prescribed by a Regional Water Quality Control Board and which is in full compliance therewith.

12. After notice and opportunity for a meeting, this Order may be terminated or modified for cause, including, but not limited to:

   a. violation of any term or condition contained in this Order;
   b. obtaining this Order by misrepresentation, or failure to disclose fully all relevant facts;
   c. a change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.

California Regional Water Quality Control Board
North Coast Region

MONITORING AND REPORTING PROGRAM NO. 86-2

FOR

LOUISIANA-PACIFIC CORPORATION
HUMBOLDT FLAKEBOARD

Humboldt County

MONITORING

Louisiana-Pacific Corporation shall monitor the discharge from the pond/marsh system to Janes Creek according to the following monitoring program:

Constituent	Units	Type of Sample	Frequency
Flow	GPD	—	Continuous
BOD (20°C, 5-day)	mg/l	Grab	Monthly
Nonfilterable Residue	mg/l	Grab	Monthly
Settleable Solids	ml/l	Grab	Monthly
Hydrogen Ion	pH	Grab	Monthly
Fish Bioassay 1/	% Survival	Grab	Monthly
Ammonia	mg/l	Grab	Monthly
Formaldehyde 2/	mg/l	Grab	Monthly
Phenol	mg/l	Grab	Monthly

REPORTING

Monitoring reports shall be submitted to the Regional Board for each month no later than the 15th day of the following month. During periods of no discharge, the reports shall certify no discharge.

Ordered by _____
Benjamin D. Kor
Executive Officer

January 30, 1986

1/ The test species shall be rainbow trout, Salmo gairdneri Richardson, test temperature shall be 14°C-17°C.

2/ The analytical method shall be EPA Method 8410 or 8411. Both methods may be found in Table 1 of EPA Publication No. SW-846 titled, "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods".

State of California
Regional Water Quality Control Board
North Coast Region

ADDENDUM TO ITEM NO. 6
ORDER NO. 86-2
NPDES NO. CA0023981
ID NO. 1B810050HUM

Finding No. 7 has been changed to read as follows:

7. The following wastewaters generated by the discharger are considered process wastewater pollutants:

    a. domestic waste
    b. boiler blowdown
    c. washwaters containing urea, formaldehyde, phenol, latex sealer and other glue wastes
    d. effluent from the clarifier for the wet scrubber for air pollution control.

    All process wastewaters are discharged to the City of Arcata sewage treatment system with the exception of the clarifier effluent which is recycled through the air pollution control system.

Prohibition A.1 should read as follows:

1. The discharge of process wastewater pollutants, as described in Finding 7, to the pond/marsh system or to Janes Creek is prohibited.

LOUISIANA-PACIFIC CORPORATION
HUMBOLDT FLAKEBOARD
86-002

MONITORING REPORT FOR THE MONTH OF MARCH, 1990

DATE	POND OVERFLOW (MGD)
1	.18
2	.18
3	.18
4	
5	
6	.18
7	.18
8	.18
9	.18
10	
11	
12	.18
13	.18
14	.18
15	.18
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
26	.158
27	.158
28	.158
29	.158
30	.158
31	

DATE OF SAMPLE 2-27-90

pH	6.3	
BOD	11	mg/l
NFR	9	mg/l
Set. Solids	ND	ml/l/hr
Bioassay	100	% survival
Ammonia	3.3	mg/l
Formaldehyde	10	mg/l
Phenol	ND	mg/l

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Signature: Don Rayburn
Title: Production Superintendent

LOUISIANA-PACIFIC CORPORATION
HUMBOLDT FLAKEBOARD
86-002

K 3/20/90

MONITORING REPORT FOR THE MONTH OF FEBRUARY, 1990

DATE	POND OVERFLOW (MGD)
1	.14
2	.18
3	
4	
5	.18
6	.23
7	.20
8	.23
9	.29
10	
11	.16
12	.34
13	.28
14	.25
15	.25
16	.25
17	
18	
19	.20
20	.19
21	.18
22	.18
23	.18
24	
25	
26	.18
27	.18
28	.18
29	
30	
31	

DATE OF SAMPLE FEB. 2-90

pH	6.6	
BOD	14	mg/l
NFR	4	mg/l
Set. Solids	ND	ml/l/hr
Bioassay	100	% survival
Ammonia	3.0	mg/l
Formaldehyde	57	mg/l
Phenol	ND	mg/l

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Signature: Alex Green
Title: Plant Manager

LOUISIANA-PACIFIC CORPORATION
HUMBOLDT FLAKEBOARD
86-002

MONITORING REPORT FOR THE MONTH OF APRIL, 1990

DATE	POND OVERFLOW (MGD)
1	
2	.158
3	.158
4	.158
5	.158
6	.158
7	
8	
9	.158
10	.158
11	.158
12	.158
13	.158
14	
15	
16	NO
17	
18	
19	DISCHARGE
20	
21	
22	
23	
24	
25	
26	
27	
28	
29	
30	
31	

DATE OF SAMPLE 4-11-90

pH	6.6	
BOD	ND	mg/l
NFR	22	mg/l
Set. Solids	ND	ml/l/hr
Bioassay	100	% survival
Ammonia	4.2	mg/l
Formaldehyde		mg/l
Phenol	ND	mg/l

5-9-90 TEST RESULTS NOT YET RECEIVED.

WATER QUALITY CONTROL BOARD REGION I
MAY 15 '90

☐ BK ___ ☐ RK ___
☐ GJ ___ ☐ LR ___
☐ FR ___ ☐ [illegible] ___
☐ RT ___ ☐ KD ___ 5-17-90
☐ JH ___ ☐ JS ___
☐ SW ___ ☐ ___
☐ ___ ☐ REPLY
☐ ALL STAFF ☐ FILE

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Signature: Art Green
Title: Plant Manager

MAY 11 1990

State of California
Regional Water Quality Control Board
North Coast Region

Cathleen A. Goodwin

EXECUTIVE OFFICER'S SUMMARY REPORT
9:00 a.m., January 30, 1986
Luther Burbank Center for the
Performing Arts
50 Mark West Springs Road
Santa Rosa, California

ITEM: 6

SUBJECT: NPDES Permit Renewal for Louisiana-Pacific Corporation, Humboldt Flakeboard

DISCUSSION: Louisiana-Pacific Corporation operates a particleboard plant in Arcata adjacent to a twenty acre pond/marsh system which overflows to a ditch tributary to Janes Creek, a tributary of Humboldt Bay.

Most of the wastewater streams at this facility are discharged to the City of Arcata sewage treatment plant. These wastewater streams include domestic waste, boiler blowdown, washwaters containing urea, formaldehyde, phenol, wax, latex sealer and other glue wastes, and effluent from the wet scrubber used for air pollution control. Wet scrubber sludge is disposed of at an approved landfill. The proposed permit prohibits the discharge of process wastewaters to the pond/marsh and Janes Creek.

The permit provides waste discharge requirements for stormwater and noncontact cooling water discharges from this facility. Urea-formaldehyde and phenolic resins are used as adhesives in the manufacture of particleboard. Stormwater runoff comes into contact with particleboard fines and sanderdust that escape from the air pollution control systems, resulting in variable concentrations of ammonia, formaldehyde, and phenol in stormwater runoff. Rainfall/run-off containing sanderdust is collected into a sump and pumped to the pond. In addition, approximately 0.014 mgd of noncontact air compressor cooling water is discharged to the pond. Overflows from the pond occur during periods of concentrated storm events. Approximately 0.15 mgd of noncontact cooling water is discharged directly to the drainage ditch. The permit limits the concentrations of BOD, nonfilterable residue, settleable solids, and pH allowed in the discharge and requires monitoring of the overflow from the pond.

PRELIMINARY STAFF
RECOMMENDATION: The Order be adopted as proposed.

Louisiana-Pacific Corporation
Western Division

P.O. Box 158, LP Drive
Samoa (Humboldt County), California 95564
707 / 443-7511

May 7, 1990

Benjamin D. Kor, Executive Officer
North Coast Regional Water
Quality Control Board
1440 Guerneville Road
Santa Rosa, California 95403

Dear Mr. Kor:

It has been nearly five months since our meeting of December 14, 1989, at which time we discussed with Regional Board staff members the issue of priorities and how to address the most pressing environmental matters at various Louisiana-Pacific facilities in the North Coast Region.

Joe Wheeler asked that, at this time, I provide you with an update of that priority list and the status of our projects.

Potter Valley Mill Site

We are in the process of evaluating four proposals to use onsite bioremediation to clean up the Penta contaminated soil at the mill. A decision will be made shortly as to the successful bidder. Prior to submittal of a work plan to your staff, we want to have an opportunity to meet with you and our consultant so that a complete understanding can be reached regarding cleanup levels and future mitigation at the site. This is an important step for Louisiana-Pacific and our consultant. We want to work closely with you to make it a successful first step.

Ukiah

Upon arrival of the approved, PE stamped drawings, all requested documentation for the stormwater filtration/recycle system will be submitted to the Regional Board. The submittal

will include operations and maintenance manuals, patent information, a SPCC Revision and sampling data tabulated since the startup of the system.

A work plan to resolve the roof top runoff condition, analytical procedures, drain contamination and local background levels naturally found for arsenic, chrome and copper will be submitted by June 15, 1990, to the Regional Board.

Covelo Landfill

Plans for the operation of the Covelo Site #3 during the summer of 1990 were submitted on April 16, 1990, as directed to the Regional Board. No response has been received to date.

Covelo Mill Site

Soil samples were taken for Penta around the site of the former planer dip system. No detection was found over the state action level. However, when work begins on an underground tank investigation in mid-May at the mill site, the backhoe will be used to take samples by the original sawmill site. All lab data with sampling locations will be submitted to the Board when compiled.

Fort Bragg Studmill

A plan for resuming a cleanup for soil contaminated with petroleum hydrocarbons and Pentachlorophenol at the Fort Bragg Studmill will be submitted by May 20, 1990. The plan is under progress at this time and will also include a surface drainage sampling plan.

Willits Studmill

A log deck debris collection system has been installed for the upper log deck. It has been inspected by the Water Quality staff.

Arcata Particleboard

L-P has excavated 1,600 cubic yards of material from the southwest corner of the abandoned log pond at Arcata Particleboard. This action has removed a significant quantity of material that had been deposited when storm runoff, mixed with accumulated sawdust from the backside of the plant, was pumped to the pond. We are presently waiting for the

completion and startup of the new air emission control equipment to see if the new system will make operations cleaner or if there will be a need for some kind of separator to prevent material from getting into the pond. Attached are the lab results for the material removed.

Calpella

We have installed two new wiers with debris cleanouts to intercept log yard material before leaving the southern boundary of the log deck adjacent to the river.

Management is taking steps to move the steam cleaning area for the Calpella equipment shop to an area south of the new fuel station which could facilitate a large skimmer and cleanout.

We are collecting product literature on steam cleaning units for possible introduction.

This update will be followed by letters to you regarding specific locations that require more detailed responses and the dates to comply with your requests.

I look forward to the day when I correspond to you that a certain project is complete and no further action is required.

Please contact me if you have questions or concerns about any of the projects.

Sincerely,

Elizabeth T. Smith

Elizabeth T. Smith
Environmental Manager

cc: J. W. Wheeler, Jr.
T. A. McKinney
W. W. Long

Attachments

ETS:lb

1839

160 Spear Street, Suite 1380
San Francisco, California
94105-1535

415/957-0110

ICF TECHNOLOGY INCORPORATED

MEMORANDUM

SUBMITTED TO: Lisa Nelson, U.S. Environmental Protection Agency

PREPARED BY: Belinda J. Peters, ICF Technology, Incorporated BJP

THROUGH: James M. James, Ecology and Environment, Incorporated

DATE: June 6, 1991

SUBJECT: Completed Work

COPY: Marcia Brooks, Ecology and Environment, Incorporated

This list is for the attached completed:

PA __ PA Review __ SSI X LSI __

Other _____

Site Name: Louisiana-Pacific Corporation

EPA ID#: CAD980673578

City, County: Arcata, Humboldt County

State Recommendation:
(for Reviews only)

FOR EPA USE ONLY

CERCLIS Lead:

1941

SSI complete 6-27-91 ✓ 6/27/91 [illegible]

recommend: NFRAP

fund lead

for [illegible]
6-27-91

(1854)

Purpose: CERCLA Screening Site Inspection

Site: Louisiana-Pacific Corporation
West End Road
Arcata, California
Humboldt County

Site EPA ID Number: CAD980673578

TDD Number: F9-9101-001

Program Account Number: FCA0333SAA

FIT Investigators: Belinda Peters
Janine Young
Tim Swillinger
ICF Technology, Incorporated

Date of Inspection: March 20, 1991

Report Prepared By: Belinda J. Peters BP
ICF Technology, Incorporated

Report Date: June 6, 1991

FIT Review/Concurrence: James M. James 6/7/91

Submitted to: Lisa Nelson
Site Assessment Manager
U.S. Environmental Protection Agency
Region IX

ICF TECHNOLOGY
160 Spear Street, Thirteenth Floor, San Francisco, CA 94105 (415) 957-0110

TABLE OF CONTENTS

APPENDIX

A Contact Log and Reports

B Air Permit Numbers for Louisiana-Pacific Corporation

C Photodocumentation

LIST OF ILLUSTRATIONS

1. INTRODUCTION

Under the authority of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) and the Superfund Amendments and Reauthorization Act of 1986 (SARA), the U.S. Environmental Protection Agency has tasked ICF Technology, Inc.'s Field Investigation Team (FIT), subcontractors to Ecology and Environment Inc., to conduct a Screening Site Inspection at Louisiana-Pacific Corporation in Arcata, California. This report summarizes FIT's investigative efforts.

2. SITE DESCRIPTION

2.1 Site Location and Owner/Operator History

The Louisiana-Pacific Corporation (LP) site is located on West End Road, southeast of the intersection of Highway 101 and Highway 299, in Arcata, California (Township 6 North, Range 1 East, Section 16, Humboldt baseline and meridian; Latitude: 40° 53' 51", Longitude: 124° 04' 22") (1,2). A site location map is provided as Figure 2-1. The LP site is approximately 10 acres in size and consists of a raw product storage building, a main processing plant, a shop, a scale shack, and an office building (3,46). Several sumps, an electrostatic precipitator and clarifier system, 2 oil skimmers, and several storage areas are also present on site (3,5). An approximately 2-acre portion of a 10-acre unlined pond, formerly used for logging purposes, is also located at the site (3). This pond is continuous with Janes Creek and Humboldt Bay via a pond discharge ditch (3,4,47). The 2-acre portion of the pond present on the LP site had been separated from the rest of the pond by a berm and vegetation prior to LP's occupation of the site, and has been further divided into 2 on-site sections by a small marsh (3). An LP facility layout map is provided as Figure 2-2. The LP facility is completely paved with the exception of the pond area and the entrance road, which will be paved in the summer of 1991 (3). The front access to the site is fenced (3).

LP is located in an out-lying industrial area of Arcata. West End Road, Walt Waldkirch Used Equipment, Bettendorf Trucking, Ken's Truck Repair, and the Northwestern Pacific Railroad tracks border LP to the west; Nampara, and privately owned land border the site to the south; a marsh and privately-owned land border the site to the east; and Alder Creek Road, Britt Lumber Company, North Coast Fabricators, and Pacific Lumber Company border the site to the north (3).

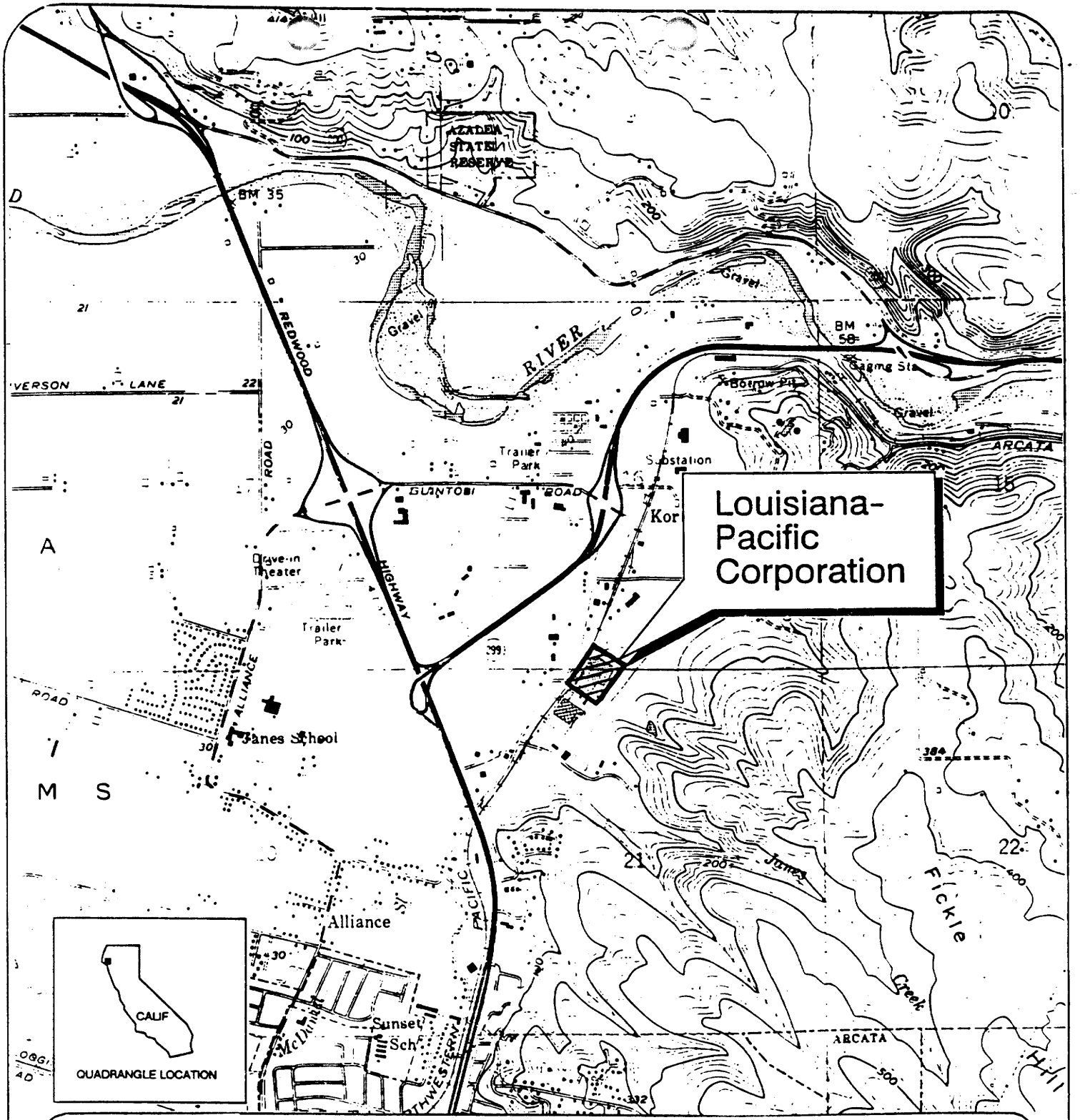

Figure 2-1 Site Location Map

Louisiana-Pacific Corporation
West End Road
Arcata, California 95564

Source: U.S. Department of the Interior, Geological Survey. Arcata North Quadrangle, California. 7.5-minute series, topographic. 1959, photorevised 1972 .

S13067-1

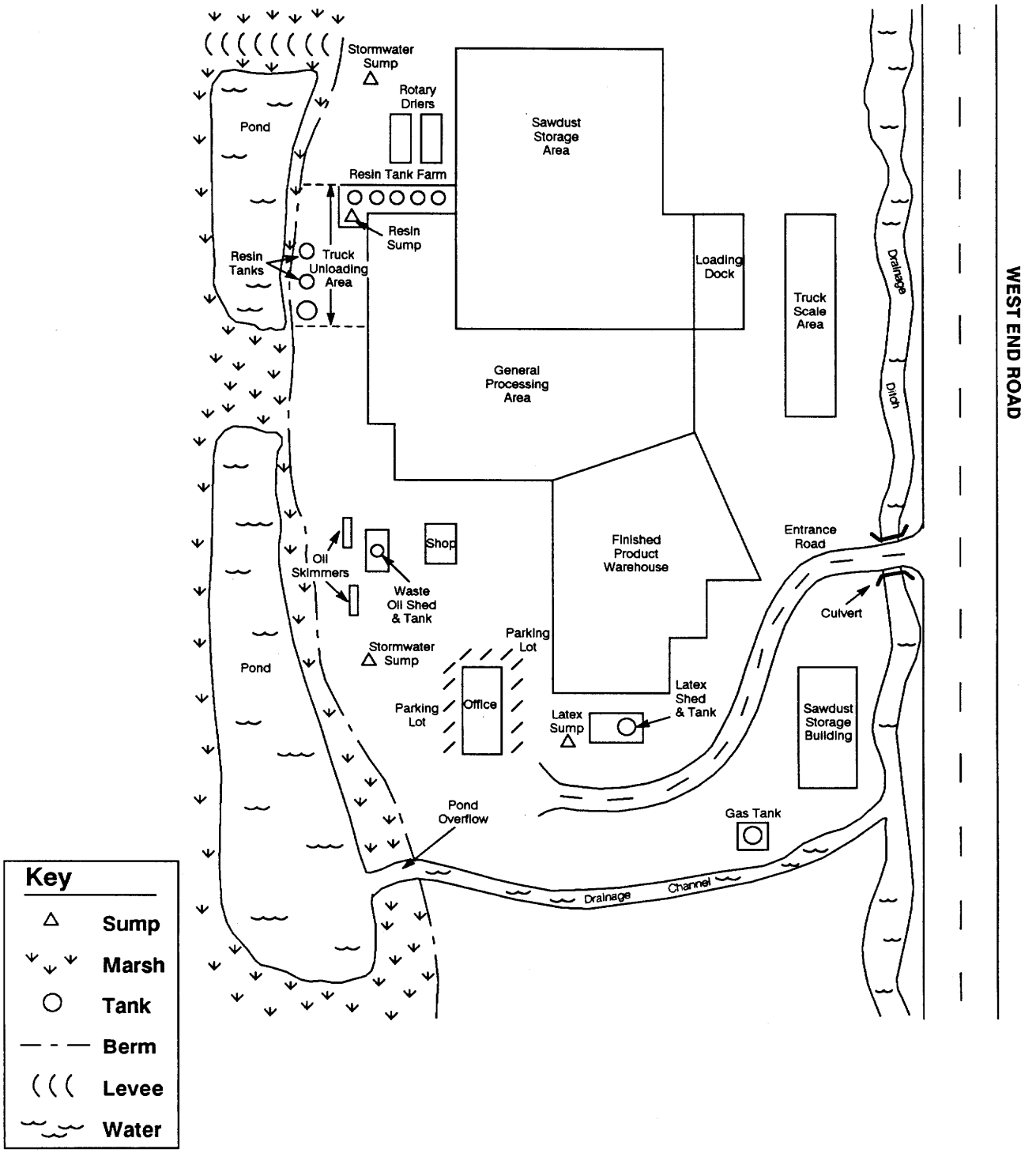

Figure 2-2 Facility Layout Map

Louisana-Pacific Corporation
West End Road
Arcata, California 95564

N

NOT TO SCALE

Source: Louisiana - Pacific Corporation, Humboldt Flakeboard, Facility Map. November 20, 1985; Peters, Belinda, Young, Janine, and Swillinger, Tim, ICF Technology, Inc. Site Reconnaissance Interview and Observations Report. March 20, 1991.

S14012-1

LP began operations in a previously existing facility at the site in 1976, and has operated there as a particle-board manufacturing plant since that time (2,3). The original facility was built in 1957 by Roddescraft, the original owner (3). After Roddescraft vacated the site on an unspecified date, Weyerhauser and then Sierra Pacific Industries subsequently operated at the facility (3). Reportedly, all past and current operators at the site have used the facility for the manufacture of particle-board. There is no information available on specific dates or periods of past operator occupation or property ownership. LP currently owns approximately 25 percent of the site property and leases the remaining portion from Martin State (3). The regional headquarters for LP is located in Samoa, California (2,3).

2.2 Facility Process and Waste Management

LP operates a particle-board manufacturing plant which receives sawdust and planer shavings from off-site generators (primarily other Louisiana-Pacific facilities) and combines them with resin to form particle-board (3). LP receives fir, pine, and redwood sawdust which is weighed and stored in one of 2 storage areas (3). The wood particles are first ground and dried in 3 rotary driers and then resin is added. The mixture is placed on a metal sheet where it is formed into a mat and pressed into a panel. The finished panel is sawed to the desired size, sanded, sealed with latex paint, and shipped off site for sale (3). Operations have reportedly remained constant since LP began operations in 1976, with the exception of the installation of an additional dryer in 1990 and the implementation of a new air emission control system in 1990 (3,6,7). Reportedly, all operators at the site prior to LP also manufactured particle-board using this process (3).

The chemicals used in LP processes are limited to resin glue (consisting of 98 percent urea and formaldehyde and 2 percent phenolic resin), wax, urea scavenger (occasionally used in combination with the resin to enhance formaldehyde bonding), and latex sealer (3). Waste oil is generated by on-site machinery and a small quantity of "Safety-Kleen Lacquer Thinner" is used for tool cleaning at the site (3,30). The only major change in the manufacturing

processes of LP involved the installation of a new air pollution control system in June 1990 (7). Prior to 1990, LP employed a low-pressure drop scrubber and clarifier system for air emission control (8). This system sprayed water into the exhaust gas stream created by the rotary dryers and the water droplets collected escaping gases and dust particles (9). The process water containing the particulates was then transferred into the clarifier where solids were allowed to settle out (3,9,14). Effluent water was discharged into the sanitary sewer and particulates were shipped to the Louisiana-Pacific Samoa facility where it is used as fuel (3,9). The new system LP installed in 1990 consisted of an electrostatic precipitator system known as an "E-Tube" (3). With the "E-Tube", exhaust gases from the rotary driers are pumped through electrically charged plates. The charged plates attract the particulates and gasses. Particulates from the plates are washed into the clarifier where they undergo the same process as with the air scrubber system (3). The "E-Tube" system reportedly reduces the volume of particulate emissions and the quantity of sludge produced by the clarifier (10,11).

The most substantial wastestream LP generates is wastewater. Non-contact cooling water and stormwater are collected into downslope, outdoor sumps. When the volume of the water in the sumps reaches a threshold level, it is discharged into the "E-Tube" clarifier. However, when there is too much wastewater for the sump to discharge into the clarifier, the excess wastewater is discharged directly into the pond (3,12,13). Other contact process wastewaters, from the oil skimmers, the washdown area, and the latex sump, are collected into the 26,000-gallon clarifier, settled, and then discharged into the city sanitary sewer (3,13). Solid particles, primarily wood, are separated from the water and removed from the clarifier by a drag chain (9). The clarifier effluent is discharged into the city of Arcata sanitary sewer and the settled sludge is transported to the Louisiana-Pacific Samoa headquarters facility where it is used as fuel in the plant's boilers (3,9). Prior to 1977, contact process wastewater was discharged into the on-site pond (4).

The only other wastes generated by LP are waste oil and small quantities of waste "Safety-Kleen Lacquer Thinner" (3,48). Oil that has been used in on-site machinery is collected into

a 300-gallon tank located in a shed on an unbermed concrete pad (see Figure 2-2) (3). Any oil present in rain water run-off is collected into oil skimmers where sorbent booms are used to collect the oil (3). The used sorbent booms are drummed and stored adjacent to the waste oil tank within the shed (3). The waste oil is shipped off site for recycling by Chico Drain Oil approximately once a month (3). Solvents used for tool cleaning by LP are kept in a self-contained, 15-gallon drum/sink maintained solely by Safety-Kleen (EPA ID#: CAT000613943)(3,25).

The sawdust and woodchips LP imports for its manufacturing process are stored in 2 different buildings on site, depending on space available (see Figure 2-2) (3). The buildings are completely enclosed with large doors allowing for heavy equipment access (3). In 1990, LP designed and installed vents in the building walls to equalize the pressure inside the building to minimize particle loss (15).

Virgin resin and wax are stored in 7 tanks in a tank farm area located adjacent to the truck unloading area (3). Six 10,000-gallon tanks and one 20,000-gallon tank, containing phenolic resin, urea-formaldehyde resin, and wax emulsion are located in a bermed, roofed area on the east side of the building. A sump is also present in the tank farm area which drains any spills or overflow to the clarifier (3,16). Across from the tank farm, in the truck loading area, are 3 more tanks containing urea-scavenger and urea-formaldehyde resin. Two of the tanks are 10,000-gallons in capacity and one tank is 20,000-gallons in capacity. These tanks are located within bermed and roofed areas (see Figure 2-2) (3,16).

Virgin latex sealer is stored in a 7,000-gallon tank located in a roofed area on a bermed concrete pad. A sump is also present in this area which drains any spills or overflow to the clarifier (3). Virgin petroleum products are stored in the shop (3,16). There is also a 3,000-gallon above-ground gasoline tank on site, located within a small, bermed building (see Figure 2-2) (16).

3. APPARENT PROBLEMS

In November 1988, the California Air Resources Board (ARB) determined that the particulate emissions from the rotary driers at the LP site exceeded the permitted discharge limit (2,8). Citizen complaints regarding the visual quality of the air in the plant vicinity were also received by ARB (8). The emitted particulates consisted primarily of wood fines, and reportedly may have contained some wood-derived hydrocarbons, tar, and pitch (8). Emitted wood fines, along with sawdust blown from the storage areas, collects on site and is often washed into the pond by stormwater or when employees hose down the site for fire prevention. The accumulation of these materials disrupts the natural flow of water through the pond and into the drainage channel (3). In 1990, the California Regional Water Quality Control Board (RWQCB) requested that LP remove approximately 1,300 cubic yards of material from the pond to improve water flow (3). LP complied and the wood fines, along with other organic material from the pond, were removed later that year (3).

Formaldehyde and ammonia have been detected in water samples of pond overflow taken by RWQCB in 1988 and 1989, and in weekly pond water monitoring performed by LP (2,17,18). According to LP representatives, RWQCB has alleged that these contaminants migrated into the pond via plant emissions and sawdust. However, also according to LP representatives, formaldehyde and ammonia are natural components of wood which are released during wood degradation. LP claims the contaminants were released to the pond by wood material which had accumulated in the pond and degraded (3).

There have been 2 documented spills of hazardous materials at the LP site (3). In 1982, a PCB-containing transformer in the main plant at LP was observed to be leaking (3,19). Operations in the area were temporarily suspended and the transformer was removed and disposed of off site by Westcomp (3). In 1987, a spill of the latex sealer occurred (20). At that time, the latex sealer sump became clogged with the sealer and the sump contents subsequently overflowed into the drainage ditch bordering the site (3,20). Sorbent booms were used to absorb the latex sealer spill, and according to LP, the material in the ditch

dissipated prior to reaching Janes Creek (3,20). No sampling has been conducted in the spill area or in Janes Creek; however, according to LP, the RWQCB and the California Department of Fish and Game are reportedly satisfied with the clean-up measures taken and were not concerned with possible contamination from the latex sealer spill or the PCB leak (3).

4. REGULATORY INVOLVEMENT

The lead agency involved with investigations at LP is RWQCB whose concerns appear to be with the impact of the site on Janes Creek (45). In September 1977, RWQCB issued a Cease and Desist Order to LP, prohibiting the further discharge of any contact process water into the logging pond. Prior to 1977 LP had no permit or discharge regulations (4). To comply with the Cease and Desist Order, LP contracted the construction of a sewer line from the site to the city of Arcata sanitary sewer system. Contact process water reportedly began being discharged into the city sanitary sewer in late 1977 (4). A permit is not currently required for the discharge of LP's wastewater into the city sanitary sewer (3,21). The City of Arcata Department of Public Works (ADPW) is currently in the process of upgrading its industrial pre-treatment program for the sanitary sewer system. In the future, LP may be required to obtain a wastewater discharge permit; however, under current regulations a permit is not required (21).

RWQCB issued LP a National Pollution Discharge Elimination System (NPDES) permit (permit #: CAD0023981) in January 1986 (13). This permit regulates the discharge of non-contact wastewater from LP into the logging pond (13,22). RWQCB regularly samples the water and sediment from the pond for formaldehyde, ammonia, and phenols (12). Under the NPDES permit, LP also samples water from the former logging pond monthly for the same compounds (13). Although RWQCB is concerned by detectable levels of formaldehyde found in the pond water, they are not currently involved with any activities at the site (3,12).

In early 1990, RWQCB requested that LP remove accumulated sawdust material from the logging pond because the material restricted natural water flow. LP completed this excavation and removal action with RWQCB approval later that year (3). RWQCB also approved the clean-up of the latex sealer spill which occurred in 1987 (20).

The particulate emissions from the rotary driers at LP are regulated by the North Coast Air Quality Management District (AQMD) (for air permit numbers see Appendix B) (2,3,47). AQMD regularly inspects LP and assesses the quantity of particulate emissions. In a November 1988 inspection by ARB, dryer particulate emissions at LP were found at levels nearly double the permitted emission limit. In May 1989, ARB issued LP a Notice of Violation. Later that month, LP requested a variance to the permitted regulations indicating they were in the process of installing a new pollution control system. The ARB variance was issued in late 1989 (8). In June 1990, LP began operating the new emission control system at the site (6). According to AQMD, LP is currently in compliance with particulate emission limits (11,15,16). AQMD continues to inspect LP on an annual basis (23).

The U.S. Environmental Protection Agency (EPA) inspected LP in March 1982 to investigate the reported leak of PCBs from an on-site transformer. A notice of inspection was issued, but there is no record of any further EPA investigation (19). Reportedly, the California Department of Fish and Game inspected LP twice, once during the PCB clean-up and once during latex sealer clean-ups (3).

There is no available information to indicate California Department of Health Services (DHS) involvement with the LP site (24). LP is not listed in the May 3, 1990 RCRA Database or on the January 1, 1990 California Bond Expenditure Plan (25,26).

5. HRS FACTORS

The Hazard Ranking System (HRS) is a scoring system used to assess the relative threat associated with actual or potential releases of hazardous substances from sites. It is the principal mechanism EPA uses to place sites on the National Priorities List (NPL). FIT has evaluated the following HRS factors relative to this site.

5.1 Waste Type and Quantity

The primary wastestream known to be generated by the particle-board manufacturing operations of LP is process wastewater. Non-contact cooling water and stormwater run-off exceeding the sump capacity are pumped directly into the former logging pond at the rear of the facility (3). Approximately 160,000 gallons per day of non-contact cooling water from the plant air compressor and particle-board press are discharged into the pond and associated drainage ditch (13). All contact process wastewater, including treated washwater from the latex sealer sump and clarifier effluent, are currently discharged into the city sanitary sewer (3). The quantity of this wastewater discharged is unknown. The wet scrubber formerly used by LP for air pollution control used approximately 2 to 240 gallons of water per minute and the normal operating flow through the clarifier, which is still in use at the site, is 20,000 gallons per day (9). There has reportedly been no sampling of wastewater at the site (3).

The only other wastes generated by LP are spent machinery oil and cleaning solvent (3). A maximum of 300 gallons of waste oil is present at the LP site at any one time, and is stored in a 300-gallon tank (3). This waste oil is stored on site for no longer than 90 days and is hauled off site monthly by Chico Drain Oil for recycling (3). Waste "Safety-Kleen Lacquer Thinner" is completely contained in a 15-gallon tank/sink, and is maintained by Safety-Kleen (3,30).

During a November 1988 inspection of LP by ARB, LP was discovered to be discharging up to 71.6 pounds of particulates per hour (pph) from the rotary drier stacks. The allowable emission is 40 pph (8). After installing the new air pollution control system in 1990, the particulate emissions from LP dropped to the current rate of approximately 10 pph (8,11).

RWQCB began sampling water from the LP pond in 1977. Presumably at that time, all wastewater was being discharged into the pond, a process which was discontinued in late 1977 upon the installation of a sanitary sewer line at the facility. The sampling revealed formaldehyde levels up to 5.35 mg/l above the background level of 0.05 mg/l; ammonia at up to 20 mg/l above the background level of 0.04 mg/l; and phenols at up to 0.003 mg/l above the background level of 0.001 mg/l (4). Background samples in this investigation were taken from 20 feet upstream from LP on Janes Creek, and the analyzed samples were taken at the point of pond overflow (4). At the request of RWQCB, LP began their own sampling of the pond water in January 1988 (18). Detectable levels of formaldehyde (up to 98 mg/l), ammonia (up to 9.2 mg/l), and phenols (up to 0.2 mg/l) have been found in these water samples (18,27). No background samples were taken for these analyses (18,27).

According to LP, much of the particulate emissions from LP migrated to the logging pond via stormwater run-off and hosing-off of the site. Some of the virgin wood chips and sawdust escaped the storage buildings and settled in the pond as well (3). In 1990, approximately 1,300 cubic yards of wood fines and organic material were excavated from the pond in response to the request by RWQCB (3). According to LP representatives, RWQCB claimed that the materials in the pond were interfering with the natural course of the water flow (3). LP analyzed the excavated material and reportedly found low levels of formaldehyde (up to 1.5 mg/kg) and ammonia (up to 28 μg/kg). No phenols were present above the detection limit of 10 μg/kg (17). LP determined that the excavated material was clean and hauled it to their Samoa facility where it was dried and is used as cover soil at the Samoa facility (3).

The only other documented spills of hazardous materials at the site involved PCB and latex sealer. During the PCB clean-up, sheets of plastic covered the bermed floor beneath the

transformer and all wastes were drummed and hauled off site for disposal at a licensed facility. The only recorded mishap which occurred during the PCB clean-up procedure was a spill of a 5-gallon can of non-PCB waste. According to LP, this spill was immediately cleaned up (3). In the other spill incident, most spilled latex sealer on site was soaked up with sorbent booms and disposed of. According to LP, an undetermined quantity of latex sealer escaped into the drainage ditch but dissipated prior to reaching Janes Creek (3,20). No sampling has been conducted in either spill area; however, according to LP, RWQCB and the California Department of Fish and Game were satisfied with the clean-up measures taken and were not concerned with possible residual contamination (3).

5.2 Groundwater

LP is located on the eastern edge of the Arcata Bottoms coastal plain, an area characterized by alluvial plains overlying unconsolidated deposits of clay, sand, and gravel known as bay mud (1,28). According to the nearest available well boring log from a private well located approximately 0.5 miles west of LP, the soil composition in the area is characterized by terrace deposits of approximately 14 feet of soil overlying approximately 2 feet of gravel and 54 feet of shale and sandstone (28). The net annual precipitation in the Eureka area is recorded as 23.94 inches (29). The groundwater gradient in Arcata Bottoms is generally southwest towards Arcata Bay (1,28).

Groundwater in the Arcata area is unconfined and occurs in the deposits beneath the alluvial plain of the Mad River in a formation known as the Blue Lake aquifer (28,32,33). There are no known confining clay layers present in these deposits (28). The depth to groundwater in the Blue Lake aquifer ranges from 12 to 90 feet below ground surface (bgs) (28,32,33).

Groundwater from the Blue Lake aquifer is the sole source of drinking water for Arcata and Eureka and the towns of Glendale, Sunnybrae, Bayside, Tyee City, McKinleyville, and

Calville which are located within 4 miles of the site (1,31,32,33). One water purveyor, the Humboldt Bay Municipal Water District (HBMWD), supplies drinking water to these areas and operates groundwater wells within 4 miles of LP (31,32). There are 5 wells operated by HBMWD, all of which are "Ranney" wells (34,35,36). "Ranney" wells are deep lateral shafts which pass through the subsurface soils into the Blue Lake aquifer beneath the Mad River area (34). All 5 wells are located within 4 miles of LP (1,32). The nearest well is located more than 1 mile north of the site (1,32). HBMWD pipes the water obtained from the integrated well system to the City of Arcata, Department of Public Works which treats and distributes the water to the approximately 60,000 residents of the 8 towns and cities (31,32). None of the wells operated by HBMWD produce greater than 40 percent of the total production (32). Table 5-1 summarizes groundwater usage in the area. Groundwater in the area is also used for irrigation, and an unknown number of active domestic wells are present within 4 miles of LP (34,35). The closest domestic wells to the site are located within 0.5 to 1 mile away (35).

Table 5-1
Humboldt Bay Municipal Water District (HBMWD)

Population Served by HBMWD: 60,000 residents	
Water Source:	100% groundwater
Total Number of Wells in System: 5 wells	
Estimated Population Served by Wells Within Each Distance Ring	
Ring Distance	Number of Wells Within Ring
0-¼	0
¼-½	0
½-1	0
1-2	4
2-3	1
3-4	0

There has been no sampling of groundwater at the LP facility. Due to the shallow depth to groundwater and the absence of any confining layers in the area, the potential for a release from the site to the potable groundwater appears to exist (13,28). However, the toxicity and persistence of contaminants present at the site is low.

5.3 Surface Water

An approximately 2-acre portion of an on-site 10-acre pond, which was formerly used for logging purposes, is located on the LP site (3,4,12). The pond used to be larger, extending over several pieces of property, but it was sectioned-off on the LP property by a berm installed by the neighboring property owner in 1976 (3). A drainage channel runs from the pond, along the property boundary, and empties into Janes Creek approximately 200 feet south of the site (1,3,12). Janes Creek eventually discharges into Humboldt Bay approximately 3 miles from the site (1). Humboldt Bay extends an additional 12 miles before entering the Pacific Ocean (1). The pond overflows into the drainage channel during periods of high precipitation, predominantly in the winter months (13). Beneficial uses of Janes Creek, the nearest downslope surface water body to LP, include agricultural water supply, water recreation, recreational fishing, and fish spawning and migration. It is not used as a source of drinking water (2,4,37). An estimated 6,000 pounds of cutthroat trout are caught from Janes Creek each year (2,38). Humboldt Bay is also used for recreational purposes, and commercial fishing. Approximately 360,000 pounds of silver salmon and 120,000 pounds of chinook salmon are caught annually in the bay (2,37).

The Mad River is located approximately 1.5 miles northwest and downslope of the LP site (1). The Mad River is frequently used for recreational fishing (38). Approximately 7,700 pounds of coho and chinook salmon and steelhead are caught from the river each year (38).

The Humboldt Bay National Wildlife Refuge is located approximately 3 miles south of LP along the northeastern corner of Humboldt Bay (1,39). There is 1 federally designated

endangered species, the California clapper rail (*Rallus longirostris obsoletus*); 2 state designated endangered species: Menzie's wallflower (*Erysimum menziesie*) and Western lily (*Lilium occidentale*); 5 federally proposed endangered species: Western snowy plover (*Charadrius alexandrinus nirosus*), Humboldt Bay Owl Clover (*Orthocarpus castillejoides humboldtiensus*), Point Reyes bird's beak (*Cordylanthus maritimus palustrius*), Tidewater goby (*Eucyclogobius newberryi*), and Humboldt Bay gumplant (*Grindelia stricta blakei*); 3 state designated critically imperiled species: Great blue heron (*Ardea herodras*), Great egret (*Casmerodius albus*), and Bank swallow (*Riparia riparia*) that are known to reside in habitats within 15 miles downstream of LP. Table 5-2 provides a summary of the sensitive environments. Spawning and migratory habitat for coastal cutthroat trout (*Oncorhynchus clarki clarki*) is located in areas along Janes Creek, Humboldt Bay, and the contiguous wetland areas (1,39,40).

No surface water bodies within 15 miles downstream of the site are used from drinking water purposes (32).

The LP site is not located in a known floodplain and the two-year, 24-hour rainfall is recorded as 3.5 inches (41,42).

In RWQCB sampling of the LP pond beginning in 1977, formaldehyde was detected at levels up to 5.35 mg/l above the background level of 0.05 mg/l; ammonia at up to 20 mg/l above the background level of 0.04 mg/l; and phenols at up to 0.003 mg/l above the background level of 0.001 mg/l (4). At the request of RWQCB, LP began their own sampling of the pond water in January 1988 (18). Detectable levels of formaldehyde (up to 98 mg/l), ammonia (up to 9.2 mg/l), and phenols (up to 0.2 mg/l) have been found in these water samples (18,27).

In the subsequent sampling conducted by RWQCB, concentrations of formaldehyde and ammonia above background levels were detected in the on-site pond (18,27). For this

Table 5-2
Sensitive Species Located Within 15 Miles of Louisiana-Pacific Corporation

Species	*Status*
California clapper rail *(Rallus longirostris obsoletus)*	FDES
Menzie's wallflower *(Erysimum menziesie)*	SDES
Western lily *(Lilium occidentale)*	SDES
Western snowy plover *(Charadrius alexandrinus nirosus)*	FPES
Humboldt Bay owl clover *(Orthocarpus castillejoides humboldtiensus)*	FPES
Point Reyes bird's beak *(Cordylanthus maritimus palustrius)*	FPES
Tidewater goby *(Eucyclogobius newberryi)*	FPES
Humboldt Bay gumplant *(Grindelia stricta blakei)*	FPES
Great blue heron *(Ardea herodras)*	SDCIS
Great egret *(Casmerodius albus)*	SDCIS
Bank swallow *(Riparia riparia)*	SDCIS

FDES = federally designated endangered species
SDES = state designated endangered species
FPES = federally proposed endangered species
SDCIS = state designated critically imperiled species

reason, an observed release to surface water may have occurred. However, no surface water bodies located within 15 miles of LP are used as drinking water sources (32).

5.4 Soil Exposure

LP is located in a primarily industrial area and approximately 1,300 residents live within 1 mile of the site (see Table 5-2) (3,43). The LP site is approximately 10 acres in size (3). The potential for a soil exposure incident appears to be low at this time because the site is entirely paved, with the exception of the pond and entrance road, and the front access to the site is fenced (3).

5.5 Air

LP currently employs approximately 90 workers who work shifts 24 hours a day (3). Approximately 21,690 residents live within 4 miles of the site (see Table 5-2) (43). The Tidewater goby (*Eucyclogobius newberryi*),Humboldt Bay gumplant (*Grindelia stricta blakei*), Humboldt Bay owl clover (*Orthocarpus castellejoides humboldtiensis*), Point Reyes bird's beak (*Cordylanthus maritimus palustris*), and Menzie's wallflower (*Erysimum menziesii*) are state or federally designated endangered or threatened species which inhabit areas within 4 miles of LP (1,39,40).

The air pollution control system operating at LP is regulated by AQMD (for air permit numbers see Appendix B) (3). In 1990, after requesting a variance of the permitted emission limits, LP installed an electrostatic precipitator which brought their particulate emissions well below the 40 pph limit (8,11). Prior to the implementation of the E-Tube system, LP emitted as much as 71 pph from the rotary dryers (8).

Table 5-3 Population Within 4 Miles of Louisiana-Pacific Corporation	
Distance (miles)	Population
on-site	90
0-¼	4
¼-½	4
½-1	1,343
1-2	2,861
2-3	10,935
3-4	6,543

The potential for a release from the site to the air appears to be low. All air emissions from LP are currently well below regulated levels (3,8,11).

6. SUMMARY OF FIT INVESTIGATIVE ACTIVITIES

On March 20, 1991, ICF Technology's Field Investigation Team (FIT) members Belinda Peters, Janine Young, and Tim Swillinger interviewed Elizabeth Smith, Environmental Manager, and Art Green, Facility Manager, at the LP facility office. The purpose of the investigation was to collect information on current facility processes and waste management practices, information on documented spills and clean-up methods, and previous ownership history. Information obtained in the interview is provided throughout this report and in the Site Reconnaissance Interview and Observations Report in Appendix A (3). Sampling by FIT was deemed unnecessary by EPA at this time because site sampling has previously been conducted by RWQCB and surface water sampling and air monitoring are currently being performed by LP in conjunction with RWQCB and AQMD (3,12,13,44). Removal of particulate matter from the pond had taken place prior to the FIT site visit (3).

Following the interview, Ms. Smith and Mr. Green led FIT members on a tour of the LP facility. During the tour, the facility appeared clean and in good condition. All chemical storage areas were well contained, and no evidence of uncontained hazardous materials was observed. Photographs taken throughout the site tour are presented in Appendix C.

7. EMERGENCY RESPONSE CONSIDERATIONS

Referral of this site to EPA's Emergency Response Section does not appear to be necessary at this time. Site remedial activities, which involved the removal of 1,300 cubic yards of particulates and other material from an on-site pond, have been performed at the LP site (3). Air emissions from the plant have been reduced to below regulatory permitted limits with the installation of a new air pollution control system (8,11). The entire facility is paved, with the exception of the pond at the rear and the entrance road, and site access is limited by fencing (3).

8. SUMMARY OF HRS CONSIDERATIONS

The Louisiana-Pacific Corporation (LP) facility is located on West End Road, southeast of the intersection of Highways 101 and 299 in Arcata, California. LP is a particle-board manufacturing plant which has operated at the site since 1976. The approximately 10-acre facility was constructed in 1957 and has reportedly been continuously occupied by particle-board manufacturing companies. Particle-board is the only product LP produces and the wastes generated are limited to contact and non-contact process wastewater, clarifier sludge, and small quantities of machine oil and "Safety-Kleen Lacquer Thinner". Contact process wastewater is discharged into the city sanitary sewer following treatment and non-contact cooling water is discharged either into the sewer or to the on-site pond. Other wastes are reportedly hauled off site for disposal.

In 1989, the State of California Air Resources Board (ARB) determined that particulate emissions from the LP plant exceeded the permitted limits and, according to LP representatives, often washed into the on-site pond by stormwater or hosing down of the pavement on site. The build-up of particulates in the pond reportedly disrupted the natural water flow. In 1990, LP installed a new air pollution control system at the facility which lowered particulate emissions below North Coast Air Quality Management District (AQMD) regulated limits. At RWQCB request, LP also excavated 1,300 cubic yards of material from the pond. Detectable levels of formaldehyde and ammonia have been detected in water samples from the pond. RWQCB and LP collect test samples from the pond on a regular basis.

Groundwater in the area of the site occurs in an unconfined aquifer beneath the Mad River bed, from approximately 12 to 90 feet below ground surface (bgs). There are no known confining layers present in the area. The underlying aquifer is used as a source of drinking water which is provided by Humboldt Bay Municipal Water District (HBMWD) to residents in the cities of Arcata and Eureka and 6 nearby towns. HBMWD currently operates 5 wells within 4 miles of the site, serving approximately 60,000 residents. There has been no

sampling of groundwater at the LP facility. Due to the shallow depth to groundwater, the potential for a release of hazardous substances from the site exists; however, the toxicity and persistence of contaminants present at the site is low.

Portions of a former logging pond is located on the LP site. This pond is continuous with Janes Creek and Humboldt Bay via a pond discharge ditch. Janes Creek is used for agricultural supply, recreation, fish spawning, and recreational fishing. Humboldt Bay is also used for recreational purposes and commercial fishing. Within 15 miles downstream of LP are areas designated as National Wildlife Refuges and 11 sensitive species are known to reside in and around these areas. The Mad River is also located within 2 miles downslope of the site and is used for recreational fishing. No surface water bodies within 15 miles downstream of the site are used for drinking water purposes. Sampling of surface water from the pond on the LP site has been conducted by RWQCB and by LP. In the 1978 sampling, concentrations of formaldehyde and ammonia above background levels were detected in the pond. An observed release to surface water may have occurred.

Approximately 1,300 people reside within 1 mile and 21,690 people reside within 4 miles of the LP facility. The potential for a release via the air route and for a soil exposure incident appear to be low because the particulate emissions from LP have been brought below regulatory permit limits with the installation of a new air pollution control system, and because the facility is paved with the exception of the pond and an entrance road. Site access is also limited by a fence.

The significant HRS factors associated with the site are:

- low toxicity and persistence of the documented on-site contaminants;
- small population using groundwater as a drinking water source;
- nearby surface waters not used as a source of drinking water; and
- low likelihood of a release via the air route and for a soil exposure incident.

9. EPA RECOMMENDATION

	Initial	Date
No Further Remedial Action Planned Under CERCLA	KW	6-27-91
Higher-Priority for Further Site Assessment		
Lower-Priority for Further Site Assessment		
Defer to Other Authority (e.g., RCRA, TSCA, NRC)		

Notes:

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SITE RECONNAISSANCE INTERVIEW AND OBSERVATIONS REPORT

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OBSERVATIONS MADE BY: Belinda Peters, Janine Young, and Tim Swillinger, ICF Technology, Inc.

DATE: March 20, 1991

FACILITY REPRESENTATIVE(S) and TITLE(S): Elizabeth Smith, Environmental Manager and Art Green, Facility Manager

SITE NAME: Louisiana-Pacific Corporation

EPA ID#: CAD980673578

The following information was obtained during the interview:

The Louisiana-Pacific (LP) site is approximately 10 acres in size. There are 5 buildings on site, including a raw product storage building, an office, a main plant, a jitney shop, and a scale shack. There are no wells on site. Three sumps are located at the facility. There are 2 stormwater sumps which drain into the pond and a sump at the latex spreader which drains into a series of septic tanks to settle out the solid matter prior to discharge into the city sewer.

LP moved into the facility approximately 15 years ago in 1976. Prior to LP, the property was owned by Sierra Pacific Industries. Sierra Pacific Industries also manufactured particle-board. The original site owner was Roddescraft who sold the property to Weyerhauser and then Sierra Pacific became the owner. The original facility was built in about 1957 and has always been used for the manufacture of particle-board. LP owns approximately 25% of the land and leases the remaining portion from Martin State.

The plant operates 24 hours a day, 7 days a week. Approximately 90 employees work at the site. The facility has operated continuously since LP moved in. About 6 or 7 years ago, the plant was running only 50% of the time, and approximately 5 years ago their operating schedule changed from 5 days a week to the current 7 days a week operation.

LP is permitted by the North Coast Air Quality Management District (AQMD) and has a NPDES permit issued by the North Coast Regional Water Quality Control Board

(RWQCB). Ms. Smith doesn't believe a permit is required for discharge into the sanitary sewer. She is going to send me the permit numbers. Both AQMD and RWQCB regularly inspect LP. AQMD does this by site drive-by and RWQCB comes to the site approximately 3 times each year for inspections and annual sampling. The last time AQMD was at the site was for the compliance test for the newly installed E-Tubes in September 1990 and the RWQCB is due at the site next week. LP is not regulated under RCRA and has no RCRA permits, only an EPA ID number.

The area of the pond unknown, but Ms. Smith will send me a scaled map which I can estimate the area from. The pond is currently filled with vegetation and is 99% dry compared to its original capacity. Two weeks ago, the pond started to overflow for the first time since last year's rainy season. When the pond overflows, the overflow runs into a ditch along the side of the facility and along West End Road. This ditch eventually flows into Janes Creek. There is also a pipeline which runs beneath the pond from the marsh behind it and drains water into the same ditch. The pond used to be much larger, but it was divided by a dike on the south end about 15 years ago by the neighboring property owner, Mark Reiner.

The only wastewater which is pumped directly into the pond is non-contact cooling water from the compressors and storm water collected into the sumps. Sawdust, as fall-out from the dryer stacks and windblown from on-site storage areas, is occasionally washed down into the stormwater sumps. This happens both by rainfall and by hosing down the site for fire prevention. When the water in the sumps reaches a certain level, the pumps turn on and it is discharged into the pond. This causes an accumulation of sawdust in the pond and in turn disrupts natural water flow at the pond. For this reason, in early 1990 RWQCB asked LP to remove the sawdust build-up from the pond to allow for water movement.

It has been alleged that hazardous materials, such as formaldehyde, phenols, and ammonia, were transported into the pond on the sawdust; however, this has never been proven. These compounds, especially formaldehyde, are common products of wood degradation.

Approximately 1,300 cubic yards of material were removed from the pond in early 1990, including sawdust, silt, and vegetation. LP had the material tested and reportedly found "no pollutants". The excavated material, which after sampling was determined to contain no hazardous materials, was laid out at the Samoa facility to dry and remains there currently as cover. Mark Alpert of RWQCB came to the site once to view this operation. This is the only remedial activity which took place at the site.

The only process that takes place at LP is the manufacture of particle-board. They buy fir, pine, and redwood planer shavings and sawdust, primarily generated by other LP facilities in the state which are stored in several areas around the site. The particles are ground and dried and then resin is added. The mixture is then formed into a mat on a metal plate and pressed into a panel. The finished panel is sawed to size, sanded, sealed, and shipped. The processes at LP have been basically the same since the facility began operation. The only exceptions are some renovations to the drying and processing systems (ie. the addition of a

new dryer), and the addition of the new air pollution control system. All former operators at the site were also reportedly particle-board manufacturers.

The resin LP uses is a composition of urea and formaldehyde (approximately 98%). The remaining 2% of the mixture is phenolic resin. LP also uses a small amount of wax and urea scavenger (which helps the formaldehyde bond). The board trimmings and sander dust are recycled back into the raw product stage. LP regularly submits annual chemical inventories and formaldehyde and phenol emission (from vaporization of the glue) reports to Humboldt County.

LP generates sludge from their air pollution system. AQMD has given the facility permission to use the sludge as hog fuel for the boilers at the Samoa facility. Less than 5 cubic yards per week of sludge are generated by the plant. Occasionally, when the clarifier gets too full, wastewater is dumped into the sewer. Wash water from the aerator, where glue is mixed with the sawdust, is also discharged into the sewer.

There is a fourth sump located in the truck unloading area. This area is surrounded by a berm and a sump is also present. The sump pumps any leaks or spills into the sanitary sewer. The material unloaded in this area is the resin which is transported on flatbed trucks in bladder packs.

There is a clarifier present on site. This clarifier is a part of the wet electrostatic precipitator, LP's improved air emissions system. The process machinery is called the E-Tube. The E-Tube process is as follows. Exhaust gases from the rotary driers (sawdust fired in burners, gases from wood dry-out, and dust and wood gases), known as the wet gas stream, are pumped through electrically charged plates. These charged plates attract the particulates which are in turn pumped into the clarifier. Water from the clarifier is discharged into the sanitary sewer and the sludge is burned at the Samoa facility as mentioned above.

There are 5 storage areas present at the site. One storage area is a tank farm consisting of 7 tanks which are used for storage of the virgin resin glue. This entire area is surrounded by a berm. One of the tanks is 20,000 gallons and the other 6 are 10,000 gallons each. Virgin latex sealer which is used in the manufacturing process is stored in a 7,000-gallon tank, in another area which is surrounded by a berm. The sawdust and wood chips are stored in two different buildings, depending on space available. They are completely enclosed and have doors to keep the sawdust from blowing around the site. Waste oil, from the on-site equipment, is stored in a 300 gallon tank. The waste oil is shipped off site for recycling by Chico Drain Oil approximately 1 time per month. There is one Safety Kleen-provided solvent wash tank in which tools are cleaned. The tank is approximately 15 gallons in size and is recycled and replenished by Safety Kleen. No wastes are stored on site for longer than 90 days.

There are 2 oil skimmers present at LP. Rain water collects in these skimmers and any oil which was picked up in the water is skimmed off and collected into the waste oil storage tank. The skimmed rainwater discharges into the storm water sump.

LP does not use any PCBs in their processes or does LP store any PCBs on site. The only PCBs which have ever been on site are in transformers. At one time, LP detected a leak in the bushing of one of the transformers in the manufacturing area of the main building. Operations in this area were temporarily shut down. The area surrounding the transformer was completely bermed and plastic sheeting was laid down within this area. All the transformer wastes were drummed and Westcomp hauled it off site for disposal at ESI in Idaho. During the removal procedures, one 5-gallon can of non-PCB waste was accidentally spilled and an employee notified an unknown agency. An inspector from the California Department of Fish and Game came out to the site to inspect the clean-up procedures, and reportedly commended LP on their containment and proceedings. The leak was over an area completely covered with concrete, there was no exposed soil, and it was within a building. No sampling of the area was conducted. The leaky transformer was replaced with a non-PCB transformer.

One other problem at the site was with the latex sump used for equipment washdown and solvent settling. At one point, the pump failed to turn on and the sump overflowed. The contents of the sump ran across the pavement and into the ditch leading to Janes Creek. The spill on the pavement was absorbed and absorbent booms were used to soak up material in the ditch. The water became cloudy in the ditch, but the material dissipated, and the water was clear again by Janes Creek. Both the California Department of Fish and Game, and the RWQCB inspected the spill and were reportedly satisfied at the clean-up measures taken. This spill was of diluted latex sealer, not any type of thinner.

The facility to the north of LP is Pacific Lumber Company. The property to the south of LP is the land owned by Mark Reiner.

The following observations were made during the site reconnaissance visit:

The area of the former leaky transformer is surrounded by a concrete berm approximately 6 inches high. The area is approximately 10 feet by 14 feet.

The resin tank farm and the associated pumps are located completely within a 6-inch berm and the floor is a concrete pad.

There are 2 wax/epoxy and formaldehyde scavenger storage tanks located across from the tank farm. These tanks are on a concrete pad and are surrounded by an approximately 1 foot high berm. These tanks and the tanks in the tank farm are covered by a roof.

The truck unloading area is asphalt and is surrounded by berms from the tanks areas on two sides and by 5 inch speed bump-like berms on the other two sides.

The stormwater sumps are approximately 6 inches below the ground level, and the depression is surrounded by a 6 inch berm. The sump is housed in concrete. Stormwater goes into the clarifier and when the water level gets too high, it is discharged into the pond.

When the material was excavated from the pond, settling areas were created so debris can be more easily removed in the future. The pond overflows through the back of the pond or through pipes in the side.

The entire site is paved with the exception of the pond and surrounding shore areas and the entrances to the facility, which are slated to be paved during the summer. There is a 3-inch berm running along the pavement separating LP from the property to the north. The front access to the site is fenced.

The latex spreader sump is located in a round, concrete vault. The latex storage tank is surrounded by a 2.5-foot berm and is on concrete in a covered area.

RWQCB collects annual pond water samples from the point where water overflows from the pond into the ditch. There is a small area for this located at that point.

The waste oil tank is located in an unbermed, open shed. There are also drums containing sorbent booms from the skimmers located in this area. The booms are hauled off site and burned in hog-fuel burners at the Samoa facility.

The skimmer allows water to settle to the bottom and drain out into a pipe. The oil floating on the top is picked up with a sorbent boom and transported off site.

The facilities bordering LP are:

North: Alder Creek Road, Britt Lumber Company, North Coast Fabricators, and Pacific Lumber Company

South: Nampara

West: West End Road, Walt Waldkirch Used Equipment, Bettendorf Trucking, Ken's Truck Repair, and Northwestern Pacific railroad tracks

East: marsh and privately owned land

APPENDIX A

Contact Logs
and
Contact Reports

PA/SI Contact Log

Facility Name: Louisiana-Pacific Corporation
Facility ID: CAD980673578

Name	Affiliation	Phone #	Date	Information
Mark Alpert*	California Regional Water Quality Control Board, North Coast Region	(707) 576-2220	6/8/90	See Contact Report
Larry Preston*	California Department of Fish and Game	(707) 445-6493	6/19/90	See Contact Report
Ralph Scott*	California Department of Water Resources	(916) 525-6530	6/25/90	See Contact Report
Harold Shamp*	Humboldt Bay Municipal Water District	(707) 443-5018	6/25/90	See Contact Report
Don Tuttle	Sutter County Department of Public Works	(707) 445-7741	6/25/90	Flooding is extremely rare in the site area. The site is not even within a 500-year floodplain.
Debra Harris	North Coast Air Quality Management District	(707) 443-3093	1/28/91	See Contact Report
Bob Clark	North Coast Air Quality Management District	(707) 443-3093	1/28/91	See Contact Report
Art Boli	Humboldt Bay Municipal Water District	(707) 443-5018	2/11/91	See Contact Report
William Rodri-quez	California Regional Water Quality Control Board, North Coast Region	(707) 576-2220	2/12/91	RWQCB is the lead agency at the site; Mr. Rodriquez is the project manager. RWQCB has a file available for review.
David Wampler	California Department of Health Services	(415) 540-3861	3/5/91	DHS has no file available on the Louisiana-Pacific, Arcata facility.
Bill Gilmer	City of Arcata, Department of Public Works	(707) 822-5957	3/7/91	See Contact Report
Larry Preston	California Department of Fish and Game	(707) 445-6493	3/11/91	See Contact Report

* Past Contact Report Used to Evaluate Current Site

PA/SI Contact Log

Facility Name: Louisiana-Pacific Corporation
Facility ID: CAD980673578

Name	Affiliation	Phone #	Date	Information
Steve Tyler	City of Arcata, Department of Public Works	(707) 822-5957	3/28/91	A permit is not currently required for industrial sewer discharge. The City is currently upgrading its pre-treatment program, so in the future LP may need a permit to discharge. It depends on what is found in samples of the discharge water from LP.
Lisa Nelson	U.S. Environmental Protection Agency	(415) 744-2347	4/1/91	Based on discussions concerning the LP site, Lisa Nelson determined that sampling was not necessary at the Louisiana-Pacific facility at this time.

CONTACT REPORT

Agency/Affiliation: California Regional Water Quality Control Board (RWQCB)

Department/Region: North Coast Region

Address/City: 1440 Guerneville Road, Santa Rosa

County/State/Zip: Sonoma, California 95403

Contact	Title	Phone
Mark Alpert	Project Officer	(707) 576-2220

Person Making Contact: Helena Brykarz, Ecology & Environment,Inc. Date: June 8, 1990

Subject: Background information

Site Name: Louisiana-Pacific Corporation EPA ID#: CAD980673578

The facility has a permit with RWQCB for discharging wastewater into the pond. Louisiana-Pacific is at a higher elevation than the pond. Wastewater overflows into the pond when the sump has too much water in it. Normally, the facility discharges wastewater into a clarifier and the resulting sludge is sent to a landfill.

From the pond, there are drainage channels which discharge into Janes Creek, which flows through culverts underneath the City of Arcata and becomes part of the estuaries emptying into Humboldt Bay. There are no beneficial uses of Janes Creek; it is used mostly for road drainage. There are fishing and recreational uses of Humboldt Bay.

RWQCB monitors the surface water and sediment from the pond (some tests monthly, other tests quarterly). It tests for pH, biological oxygen demand, bioassays, phenols, formaldehyde, etc. Sampling has detected high levels of formaldehyde in the pond (approximately 10 to 57 mg/l). However, background levels in the surrounding stream also indicated increased levels of formaldehyde. Formaldehyde may have been released to the other streams due to the air emissions from the facility. RWQCB has not taken any enforcement actions since a clear observed release has not been identified. Some of the formaldehyde present could be from natural biological changes taking place in the pond. The pond was once used for floating logs.

The facility is currently in the process of making major changes to curtail its air emissions. Louisiana-Pacific has had problems with air emissions; not only with stack emissions, but through blowing dust. Louisiana-Pacific imports fine-grained wood chips and saw dust to manufacture particle-board. While this material is stored inside buildings, it is moved around the site. The wind may carry the material through large doors in the building.

There are no on-site monitoring wells. The groundwater locally in Arcata Bottoms is very shallow.

CONTACT REPORT

Agency/Affiliation: California Department of Fish and Game

Department/Region:

Address/City: 619 2nd Street, Eureka

County/State/Zip: Humboldt, California 95501

Contact	Title	Phone
Larry Preston	Fisheries Biologist	(707)445-6493

Person Making Contact: Helena Brykarz, Ecology & Environment, Inc. Date: June 19, 1990

Subject: Fish catch

Site Name: Louisiana-Pacific Corporation EPA ID#: CAD980673578

The Humboldt Fishing Council had a trapping program around Fresh Water Creek in Humboldt Bay. They estimated that there are approximately 30,000 silver salmon caught annually at that location (360,000 pounds caught/year).

The City of Arcata had a trapping program in Humboldt Bay near Jolly Giant Creek. An estimated 5,000 to 10,000 chinook salmon are present annually (120,000 pounds caught/year).

In 1979, the estimated population at Janes Creek below the tailings pond indicated 25 to 33 coastal cutthroat trout per monitoring station, which were approximately 30 meters long. The fish are caught predominantly by children. The creek runs below ground at Alliance Avenue. Its flow rate is low, approximately 2 cubic feet per second, during the summer. Sampling has indicated a fair amount of tannin and lignin in the water which restrict fish growth and reproduction. The agency will be conducting a fish count during this summer. There was a report of an ammonia release from Forest Cascade in 1987. He did not know of any problems with Louisiana-Pacific. Perhaps Ron Warren, at the same office, would know.

CONTACT REPORT

Agency/Affiliation: California Department of Water Resources

Department/Region: Northern District

Address/City: P.O. Box 607, Red Bluff

County/State/Zip: Tehama, California 06080

Contact	Title	Phone
Ralph Scott		(916)525-6530

Person Making Contact: Helena Brykarz, Ecology & Environment, Inc. Date: June 25, 1990

Subject: Well information

Site Name: Louisiana-Pacific Corporation EPA ID#: CAD980673578

In the Arcata area, the drinking water is mainly from the Mad River wells. In the flats, groundwater is used predominantly for irrigation. The Ranney wells are deep lateral shafts that pass through a thick layer of gravel in the Mad River area to a buried channel. Franciscan Bedrock stretches across this area.

CONTACT REPORT

Agency/Affiliation: Humboldt Bay Municipal Water District

Department/Region: Pumping Station

Address/City: P.O. Box 95, Eureka

County/State/Zip: Humboldt, California 95501

Contact	Title	Phone
Harold Shamp		(707)822-2918

Person Making Contact: Helena Brykarz, Ecology & Environment, Inc. Date: June 25, 1990

Subject: Well location

Site Name: Louisiana-Pacific Corporation EPA ID#: CAD980673578

The Ranney well closest to Arcata is 200 yards upstream of the U.S. Geological Survey gaging station on the Highway 299 bridge. The other 3 wells are located upstream, approximately 0.5 miles along the river. The last well, #5, which is no longer operating, is at the junction of Lindsay Creek and Mad River.

The wells pump water into a reservoir where the water is chlorinated before being served to the city.

CONTACT REPORT

Agency/Affiliation: North Coast Air Quality Management District

Department/Region:

Address/City: 5630 South Broadway Avenue, Eureka

County/State/Zip: Humboldt, California 95501

Contact	Title	Phone
Debra Harris	secretary	(707)443-3039

Person Making Contact: Laurie Campbell, Ecology & Environment, Inc. Date: January 28, 1991

Subject: Air emissions

Site Name: Louisiana-Pacific Corporation EPA ID#: CAD980673578

The new pollution control system for the stacks at Louisiana-Pacific began operating on June 14, 1990. The emissions were later tested and the facility is in compliance with the district's emissions standards. The stack emissions average 5 to 10 pounds per hour and the district's emission limits are 40 pounds per hour for wood drying processes.

CONTACT REPORT

Agency/Affiliation: North Coast Air Quality Management District

Department/Region:

Address/City: 5630 South Broadway Avenue, Eureka

County/State/Zip: Humboldt, California 95501

Contact	Title	Phone
Bob Clark	Project Officer	(707)443-3039

Person Making Contact: Laurie Campbell, Ecology & Environment, Inc. Date: January 28, 1991

Subject: Air emissions

Site Name: Louisiana-Pacific Corporation EPA ID#: CAD980673578

The facility is in complete compliance with the district's emission limits for stack and visible particulate emissions. The facility is tested on a yearly basis to determine if it is in compliance. It was last tested in September or October of 1990, after the new pollution control system began operating, and the emissions were within the district's limit of 40 pound per hour for wood drying processes.

At the facility, wood chips are dried at high temperatures and then pressed into boards by adding resin and pressure at high temperatures. Particulates are released through the stacks during the drying process and may contain formaldehyde, which is inherently present in the wood, and is released due to high temperatures during drying.

The resin used to make the chips stick together in boards contains formaldehyde. At some point in the pressing process, ammonia is added to scavenge excess formaldehyde to prevent its release to the atmosphere.

The new pollution control system is associated with the drying process. This system and the installation of a third rotary dryer, allow the facility to operate all of its dryers at a lower temperature and this greatly reduces the particulate load released through the stacks.

CONTACT REPORT

Agency/Affiliation: Humboldt Bay Municipal Water District

Department/Region: Pumping Station

Address/City: P.O. Box 95, Eureka

County/State/Zip: Humboldt, California 95501

Contact	Title	Phone
Art Boli	Geologist	(707)443-5018

Person Making Contact: Laurie Campbell, Ecology & Environment, Inc. Date: February 11, 1991

Subject: Groundwater wells

Site Name: Louisiana-Pacific Corporation EPA ID#: CAD980673578

The District owns 5 Ranney wells that are located along the Mad River at the following locations on the Arcata North 7.5-minute quadrangle:

Station #1: SE of NE Section 15/Township 6 N/Range 1 E
Station #2: SW of NE Section 15/Township 6 N/Range 1 E
Station #3: SW of NE Section 14/Township 6 N/Range 1 E
Station #4: SW of NW Section 14/Township 6 N/Range 1 E
Station #5: NE of SW Section 14/Township 6 N/Range 1 E

All of the wells are active and blended together, but not with surface water. The District serves Arcata, Eureka, and some outlying areas, a total population of approximately 60,000. All of the wells are located along the Mad River, are perforated in the Blue Lake aquifer, and are upgradient of the site. Well stations #1, #2, #4, and #5 are located between 1 and 2 miles from the site, and well station #3 is located between 2 and 3 miles from the site. None of the wells produce greater than 40 percent of the total groundwater production.

CONTACT REPORT

Agency/Affiliation: City of Arcata

Department/Region: Department of Public Works

Address/City: 735 F Street, Arcata

County/State/Zip: Humboldt, California 95521

Contact	Title	Phone
Bill Gilmer		(707)822-5957

ICF Person Making Contact: Belinda Peters Date: March 7, 1991

Subject: Well information and water supply information

Site Name: Louisiana-Pacific Corporation EPA ID#: CAD980673578

All of the water for the City of Arcata is supplied by Humboldt Bay Municipal Water District (HBMWD). HBMWD operates wells and pumps water to Arcata Department of Public Works, who treats the water and distributes it to the connections. Louisiana-Pacific draws water from the Humboldt Bay Municipal Water District before it is treated by the City of Arcata. However, Louisiana-Pacific pays water bills to the City.

CONTACT REPORT

Agency/Affiliation: California Department of Fish and Game

Department/Region:

Address/City: 619 2nd Street, Eureka

County/State/Zip: Humboldt, California 95501

Contact	Title	Phone
Larry Preston	Fisheries Biologist	(707)445-6493

ICF Person Making Contact: Belinda Peters Date: March 11, 1991

Subject: Fish catch and flow rate for Janes Creek and Mad River

Site Name: Louisiana-Pacific Corporation EPA ID#: CAD980673578

Cutthroat trout are the primary type of fish caught in Janes Creek, some steelhead are also caught. All fishing in Janes Creek is recreational; there is no commercial fishing. Janes Creek empties into Humboldt Bay through a marshy area known as McDaniel Slough. The flow rate for Janes Creek was recorded as 5 cubic feet per second in January 1983.

Salmon (coho and chinook) and steelhead are caught recreationally from the Mad River. The fish catch for the river, recorded in 1973/1974, is 7,768 pounds total, including steelhead, trout, salmon, and suckers. The flow rate of the Mad River varies depending on flow release from the upstream reservoir operated by Humboldt Bay Municipal Water District. The minimum winter flow is 75 cubic feet per second and the minimum summer flow is 35 cubic feet per second. Mr. Preston estimates that the average winter flow rate would be greater than 100 cubic feet per second.

APPENDIX B

Air Permit Numbers
for Louisiana-Pacific Corporation

Appendix B

Air Permit Numbers for Louisiana-Pacific Corporation

North Coast Air Quality Management District Permit Number	*Louisiana-Pacific Corporation Equipment Regulated*
HAC-202	Bauer Hog Cyclone
HAC-222	New Drier
HC-191	Carter Day, #3
HC-207	Floor Sweep, #17
HC-220	Jeff Hog 2, #6
HC-224	Jeff Hog 1, #21
HC-274	Matt Trim, #25
HC-286	Carter Day, #2
HC-289	Upper Line Suck, #28
HC-306	Carter Day, #1
HC-348	East Bauer, #30A
HC-349	West Bauer, #30B
HC-350	Pallman Flakers, #32
HC-355	Sprout-Waldron, #31
HC-370	Central Bauer, #30C
HD-028	Steam Generator
HD-221	Dryer, #4
HD-222	Dryer, #5
HD-231C	E-Tube
HD-232S	E-Tube
HD-233S	E-Tube

Reference: Smith, Elizabeth, Louisiana-Pacific Corporation to Peters, Belinda, ICF Technology, Inc. Letter. April 1, 1991.

APPENDIX C

Photographic Documentation
of Louisiana-Pacific Corporation
Arcata, California

Photos Taken March 20, 1991
By Belinda Peters

Photo 1: View of the entire LP facility from Highway 299 (facing west).

Photo 2: One of 2 sawdust storage areas at LP. View of loading dock and sawdust conveyor system (facing east).

Photo 3: Former logging pond located behind LP facility. Pond overflows through back and through pipes in bottom left corner of photo (facing east).

Photo 4: Pond overflow into drainage ditch (facing southwest)

Photo 5: Stormwater sump at LP facility (facing west).

Photo 6: Oil skimmer in concrete, below-grade vault adjacent to waste oil storage shed (facing west).

Photo 7: Air emission stacks from rotary drier system (facing east).

Photo 8: Lower portion or air emission stacks with newly installed E-Tube system (facing east).

Photo 9: Virgin resin storage tank farm adjacent to truck unloading area. Note berming surrounding tank farm (facing west).

Photo 10: Second resin storage tank area, also bermed. The tank in the foreground is not part of this storage tank system (facing northeast).

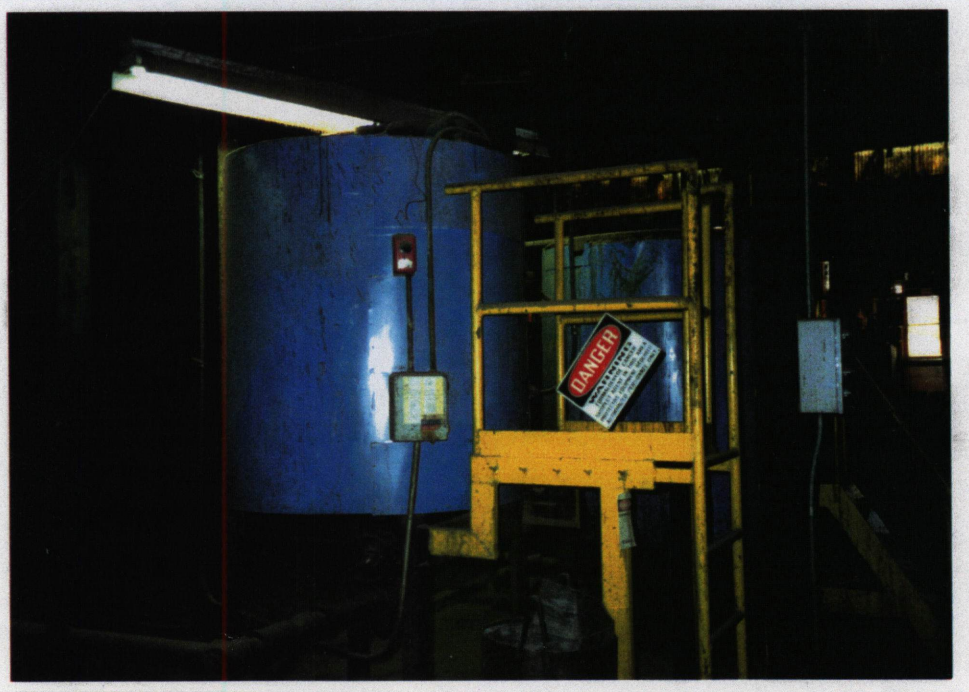


Photo 11: "In-use resin tank"-resin from this tank is added to sawdust to create the particle-board mixture (facing east).

Photo 12: Latex sealer storage tank, surrounded by a 2.5-foot berm and enclosed within a shed (facing west).

Photo 13: Sump for latex sealer, located within a round concrete vault and covered by a concrete lid (facing north).

Photo 14: Waste oil storage tank and drums storing used sorbent booms from oil skimmer. Located in an open, unbermed shed (facing west).

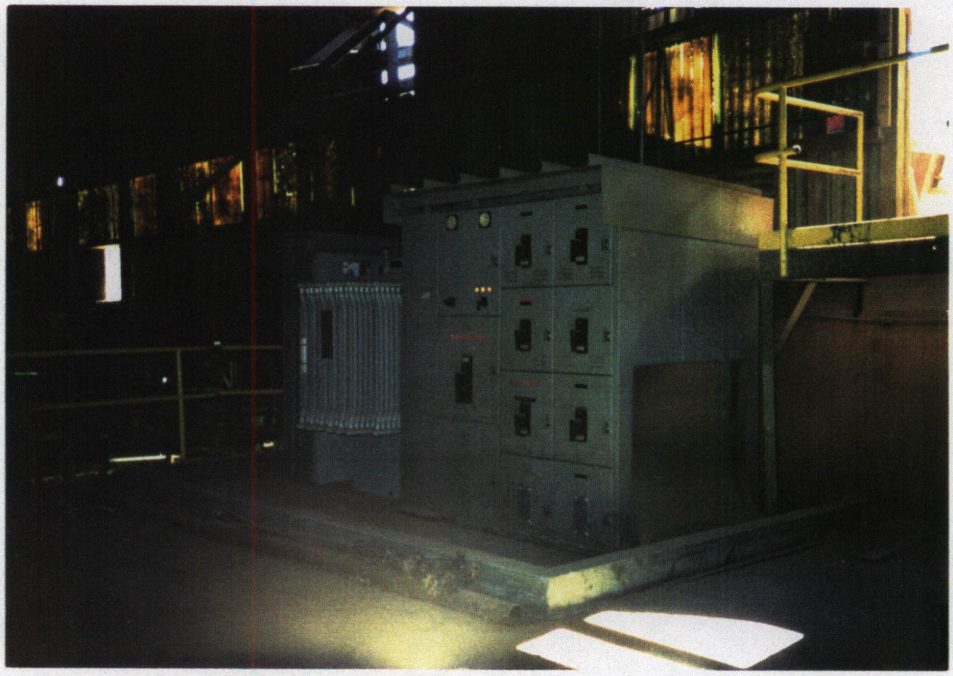


Photo 15: Transformer within main LP plant. Site of former transformer leak; current transformer contains no PCBs. Note berming (facing southeast).

PRELIMINARY ASSESSMENT
Region 9

Name Frances Schultz

Date 10-13-82

Also see CAD006248558

707-822-5961 - Flake Board Facil

	SOURCE	INFORMATION
1. Site ID Number		
2. Site Name	3 Forms	Louisiana Pacific Co. - Arcata
3. Site Location		+ Arlington
4. County		Humboldt
5. Owner (Address & telephone no.)		Louisiana Pacific Co. P.O. Box 158 CA 95526H
6. Operator (Address & telephone no.)		
7. Type of Ownership		Private
8. Status		Active
9. Source Activity		Particle board facility.
10. Years of Operation		
11. Facility Type		PCBs in drums & transformers.
12. Waste Type and Description		PCBs.

13. Contacts Tom Mix, EPA 415-974-8150
Daniel Horgan, EPA 415-974-7407
A. Kelly Stalker, L.P.Co.

14. Incidents Facility walkthrough showed a transformer w/ apparent leaks.

15. Inspections (date, type, by whom, recommendations)
TSCA insp. 3-12-82 by EPA

16. Enforcement History (list date, type of action, requirements, outcome)

17. Comment (action required by EPA) NFA by RRS

18. Response Termination: ~~X~~ No Further Action ___X___ Pending _____ Active

Justification: site referred to TSCA for action.
Paula Bisson 84-05

	SOURCE	INFOPMATION
9. Observed Release		
0. Depth to Aquifer		
1. Net Precipitation Net seasonal rainfall Evaporation		
2. Permeability of Unsaturated Zone		
3. Physical State		
4. Containment (Ground Water)		
5. Toxicity		
6. Persistence		
7. Waste Quantity		
8. Ground Water Use		
9. Distance to Well		
0. Population Served (by ground water)		

	SOURCE	INFORMATION
1. Facility Slope		
2. 1 yr. 24 hr. rainfall		
3. Distance to Surface Water		
4. Containment (Surface Water)		
5. Surface Water Use		
6. Distance to Sensitive Environment		
7. Population Served (by Surface Water)		
8. Distance to Water Intake		
9. Reactivity		
10. Incompatibility		
11. Toxicity (air)		
12. Population within 4 mile radius		
13. Land Use		

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 1 - SITE INFORMATION AND ASSESSMENT

EPA

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
CA	

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site)	02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER
LOUISIANA PACIFIC CO. - ARCATA	

03 CITY	04 STATE	05 ZIP CODE	06 COUNTY	07 COUNTY CODE	08 CONG DIST
ARCATA	CA		HUMBOLDT	023	02

09 COORDINATES	LATITUDE	LONGITUDE
	___ ___ ___.__	___ ___ ___.__

10 DIRECTIONS TO SITE (Starting from nearest public road)

III. RESPONSIBLE PARTIES

01 OWNER (If known)	02 STREET (Business, mailing, residential)
LOUISIANA PACIFIC COMPANY	P.O. BOX 158

03 CITY	04 STATE	05 ZIP CODE	06 TELEPHONE NUMBER
SAMOA	CA	95564	( )

07 OPERATOR (If known and different from owner)	08 STREET (Business, mailing, residential)

09 CITY	10 STATE	11 ZIP CODE	12 TELEPHONE NUMBER
			( )

13 TYPE OF OWNERSHIP (Check one)

☒ A. PRIVATE ☐ B. FEDERAL: _____ (Agency name) ☐ C. STATE ☐ D. COUNTY ☐ E. MUNICIPAL

☐ F. OTHER: _____ (Specify) ☐ G. UNKNOWN

14 OWNER/OPERATOR NOTIFICATION ON FILE (Check all that apply)

☐ A. RCRA 3001 DATE RECEIVED: ___/___/___ (MONTH DAY YEAR) ☐ B. UNCONTROLLED WASTE SITE (CERCLA 103 c) DATE RECEIVED: ___/___/___ (MONTH DAY YEAR) ☐ C. NONE

IV. CHARACTERIZATION OF POTENTIAL HAZARD

01 ON SITE INSPECTION

☒ YES DATE 05/12/82 (MONTH DAY YEAR)

☐ NO

BY (Check all that apply)

☒ A. EPA ☐ B. EPA CONTRACTOR ☐ C. STATE ☐ D. OTHER CONTRACTOR

☐ E. LOCAL HEALTH OFFICIAL ☐ F. OTHER: _____ (Specify)

CONTRACTOR NAME(S): _____

02 SITE STATUS (Check one)	03 YEARS OF OPERATION
☒ A. ACTIVE ☐ B. INACTIVE ☐ C. UNKNOWN	BEGINNING YEAR ____ ENDING YEAR ____ ☒ UNKNOWN

04 DESCRIPTION OF SUBSTANCES POSSIBLY PRESENT, KNOWN, OR ALLEGED

PCB's

05 DESCRIPTION OF POTENTIAL HAZARD TO ENVIRONMENT AND/OR POPULATION

Leaking from electrical transformers may contaminate soil and could potentially result in impacts to the surface water and ground water pathways of exposure

V. PRIORITY ASSESSMENT

01 PRIORITY FOR INSPECTION (Check one. If high or medium is checked, complete Part 2 - Waste Information and Part 3 - Description of Hazardous Conditions and Incidents)

☐ A. HIGH (Inspection required promptly) ☐ B. MEDIUM (Inspection required) ☐ C. LOW (Inspect on time available basis) ☒ D. NONE (No further action needed, complete current disposition form)

VI. INFORMATION AVAILABLE FROM

01 CONTACT	02 OF (Agency/Organization)	03 TELEPHONE NUMBER
Daniel Hagan	EPA, Toxics + Waste Mgmt Div	(415) 974-7467

04 PERSON RESPONSIBLE FOR ASSESSMENT	05 AGENCY	06 ORGANIZATION	07 TELEPHONE NUMBER	08 DATE
Thomas R Mix	EPA	Toxics + Waste Mgmt	(415) 974-8153	09/16/82 (MONTH DAY YEAR)

EPA FORM 2070-12 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 2 - WASTE INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01 PHYSICAL STATES *(Check all that apply)*

- [ ] A. SOLID
- [ ] B. POWDER, FINES
- [ ] C. SLUDGE
- [ ] D. OTHER _____ *(Specify)*
- [ ] E. SLURRY
- [X] F. LIQUID
- [ ] G. GAS

02 WASTE QUANTITY AT SITE
(Measures of waste quantities must be independent)

TONS _____
CUBIC YARDS _____
NO. OF DRUMS _____

03 WASTE CHARACTERISTICS *(Check all that apply)*

- [X] A. TOXIC
- [ ] B. CORROSIVE
- [ ] C. RADIOACTIVE
- [X] D. PERSISTENT
- [ ] E. SOLUBLE
- [ ] F. INFECTIOUS
- [ ] G. FLAMMABLE
- [ ] H. IGNITABLE
- [ ] I. HIGHLY VOLATILE
- [ ] J. EXPLOSIVE
- [ ] K. REACTIVE
- [ ] L. INCOMPATIBLE
- [ ] M. NOT APPLICABLE

III. WASTE TYPE

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SLU	SLUDGE			
OLW	OILY WASTE			
SOL	SOLVENTS			
PSD	PESTICIDES			
OCC	OTHER ORGANIC CHEMICALS			
IOC	INORGANIC CHEMICALS			
ACD	ACIDS			
BAS	BASES			
MES	HEAVY METALS			

IV. HAZARDOUS SUBSTANCES *(See Appendix for most frequently cited CAS Numbers)*

01 CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04 STORAGE/DISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONCENTRATION
	PCB's		drums		

V. FEEDSTOCKS *(See Appendix for CAS Numbers)*

CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER	CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER
FDS			FDS		
FDS			FDS		
FDS			FDS		
FDS			FDS		

VI. SOURCES OF INFORMATION *(Cite specific references, e.g., state files, sample analysis, reports)*

EPA FORM 2070-12 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 ☐ A. GROUNDWATER CONTAMINATION 03 POPULATION POTENTIALLY AFFECTED: _____	02 ☐ OBSERVED (DATE: _____) 04 NARRATIVE DESCRIPTION	☒ POTENTIAL	☐ ALLEGED
01 ☐ B. SURFACE WATER CONTAMINATION 03 POPULATION POTENTIALLY AFFECTED: _____	02 ☐ OBSERVED (DATE: _____) 04 NARRATIVE DESCRIPTION	☒ POTENTIAL	☐ ALLEGED
01 ☐ C. CONTAMINATION OF AIR 03 POPULATION POTENTIALLY AFFECTED: _____	02 ☐ OBSERVED (DATE: _____) 04 NARRATIVE DESCRIPTION	☐ POTENTIAL	☐ ALLEGED
01 ☐ D. FIRE/EXPLOSIVE CONDITIONS 03 POPULATION POTENTIALLY AFFECTED: _____	02 ☐ OBSERVED (DATE: _____) 04 NARRATIVE DESCRIPTION	☐ POTENTIAL	☐ ALLEGED
01 ☐ E. DIRECT CONTACT 03 POPULATION POTENTIALLY AFFECTED: _____	02 ☐ OBSERVED (DATE: _____) 04 NARRATIVE DESCRIPTION	☐ POTENTIAL	☐ ALLEGED
01 ☐ F. CONTAMINATION OF SOIL 03 AREA POTENTIALLY AFFECTED: _____ (Acres)	02 ☐ OBSERVED (DATE: _____) 04 NARRATIVE DESCRIPTION	☒ POTENTIAL	☐ ALLEGED
01 ☐ G. DRINKING WATER CONTAMINATION 03 POPULATION POTENTIALLY AFFECTED: _____	02 ☐ OBSERVED (DATE: _____) 04 NARRATIVE DESCRIPTION	☐ POTENTIAL	☐ ALLEGED
01 ☐ H. WORKER EXPOSURE/INJURY 03 WORKERS POTENTIALLY AFFECTED: _____	02 ☐ OBSERVED (DATE: _____) 04 NARRATIVE DESCRIPTION	☐ POTENTIAL	☐ ALLEGED
01 ☐ I. POPULATION EXPOSURE/INJURY 03 POPULATION POTENTIALLY AFFECTED: _____	02 ☐ OBSERVED (DATE: _____) 04 NARRATIVE DESCRIPTION	☐ POTENTIAL	☐ ALLEGED

EPA

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION

01 STATE	02 SITE NUMBER

II. HAZARDOUS CONDITIONS AND INCIDENTS *(Continued)* N/A

01 ☐ J. DAMAGE TO FLORA 04 NARRATIVE DESCRIPTION	02 ☐ OBSERVED (DATE: _____)	☐ POTENTIAL	☐ ALLEGED
01 ☐ K. DAMAGE TO FAUNA 04 NARRATIVE DESCRIPTION *(Include name(s) of species)*	02 ☐ OBSERVED (DATE: _____)	☐ POTENTIAL	☐ ALLEGED
01 ☐ L. CONTAMINATION OF FOOD CHAIN 04 NARRATIVE DESCRIPTION	02 ☐ OBSERVED (DATE: _____)	☐ POTENTIAL	☐ ALLEGED
01 ☐ M. UNSTABLE CONTAINMENT OF WASTES *(Spills/runoff/standing liquids/leaking drums)* 03 POPULATION POTENTIALLY AFFECTED: _____	02 ☐ OBSERVED (DATE: _____) 04 NARRATIVE DESCRIPTION	☐ POTENTIAL	☐ ALLEGED
01 ☐ N. DAMAGE TO OFFSITE PROPERTY 04 NARRATIVE DESCRIPTION	02 ☐ OBSERVED (DATE: _____)	☐ POTENTIAL	☐ ALLEGED
01 ☐ O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs 04 NARRATIVE DESCRIPTION	02 ☐ OBSERVED (DATE: _____)	☐ POTENTIAL	☐ ALLEGED
01 ☐ P. ILLEGAL/UNAUTHORIZED DUMPING 04 NARRATIVE DESCRIPTION	02 ☐ OBSERVED (DATE: _____)	☐ POTENTIAL	☐ ALLEGED

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS

III. TOTAL POPULATION POTENTIALLY AFFECTED: _____

IV. COMMENTS

V. SOURCES OF INFORMATION *(Cite specific references, e. g., state files, sample analysis, reports)*

EPA

POTENTIAL HAZARDOUS WASTE SITE
CURRENT DISPOSITION
PART 1 - SITE STATUS

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
CA	

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site)	02 STREET, ROUTE NO., OR OTHER SPECIFIC LOCATION IDENTIFIER
Louisiana Pacific Company (Arcata)	P.O. Box 158

03 CITY	04 STATE	05 ZIP CODE	06 COUNTY	07 COUNTY CODE	08 CONG DIST
Samoa	CA	95564	Humboldt	023	02

III. CURRENT SITE STATUS

01 REPORTING DATE: 03 / 12 / 82 (MONTH DAY YEAR)

02 TRACKING COMPLETED (Check one if applicable)

☒ A. SITE REQUIRED NO RESPONSE — DATE CLOSED 03 / 12 / 82 (MONTH DAY YEAR)

☐ B. ALL GOVERNMENT FINANCED ACTIVITIES COMPLETED — DATE COMPLETED ___/___/___ (MONTH DAY YEAR) — TOTAL COST ___

☐ C. ALL PRIVATELY FINANCED ACTIVITIES COMPLETED — DATE COMPLETED ___/___/___ (MONTH DAY YEAR)

☐ D. SITE CLOSED — DATE CLOSED ___/___/___ (MONTH DAY YEAR)

03 PENDNG (Check if applicable)

☐ FURTHER RESEARCH AND ANALYSIS REQUIRED — EXPECTED COMPLETION DATE ___/___/___ (MONTH DAY YEAR)

REFERENCE

04 MONITORING (Check if applicable)

☐ SITE REQUIRES CONTINUED SURVEILLANCE/MONITORING — SCHEDULE ☐ A. MONTHLY ☐ B. SEMI ANNUALLY ☐ C. QUARTERLY ☐ D. ANNUALLY

REFERENCE

05 FULL FIELD INVESTIGATION (Check one if applicable)

☐ A. NEEDED ☐ B. IN PROGRESS ☐ C. COMPLETED — DATE COMPLETED ___/___/___ (MONTH DAY YEAR)

06 REMEDIAL RESPONSE (Check one if applicable)

☐ A. NEEDED ☐ B. IN PROGRESS ☐ C. COMPLETED — DATE COMPLETED ___/___/___ (MONTH DAY YEAR)

07 PLANNED REMOVAL (Check one if applicable)

☐ A. NEEDED ☐ B. IN PROGRESS ☐ C. COMPLETED — DATE COMPLETED ___/___/___ (MONTH DAY YEAR)

08 IMMEDIATE REMOVAL (Check one if applicable)

☐ B. IN PROGRESS ☐ C. COMPLETED — DATE COMPLETED ___/___/___ (MONTH DAY YEAR)

09 RESPONSIBLE PARTIES (Check if applicable)

☐ RESPONSE/REMOVAL ACTIVITIES UNDER CONTROL OF RESPONSIBLE PARTIES

10 ENFORCEMENT (Privately financed removal/response activities linked to enforcement are carried in the Enforcement Docket System)

☐ A. ADMINISTRATIVE ORDER ISSUED — DATE ISSUED ___/___/___ (MONTH DAY YEAR) — COMPLIANCE DATE ___/___/___ (MONTH DAY YEAR)

☐ B. CIVIL/CRIMINAL LITIGATION FILED — DATE FILED ___/___/___ (MONTH DAY YEAR) — WHERE FILED ___ (Judicial District) — JUDGEMENT/SETTLEMENT DATE ___/___/___ (MONTH DAY YEAR)

IV. SITE RANKING

01 SITE RANKING AVAILABLE (Check one)

☐ A. YES RANKING: ___ ☐ B. NO ☐ C. PLANNED ☒ D. UNNECESSARY ☐ E. UNKNOWN

02 STATE PRIORITY: ___

V. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

TSCA Site Investigation Report for the Facility. Prepared by Sandy Avon, Field Investigator

VI. INFORMATION AVAILABLE FROM

01 PREPARED BY	02 AGENCY	03 ORGANIZATION	04 TELEPHONE NO.	05 DATE
Thomas A. Mix	EPA	TOXICS & WASTE MGMT	(415) 974-8153	08/16/82 (MONTH DAY YEAR)

EPA FORM 2070-14 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
CURRENT DISPOSITION
PART 2 - GOVERNMENT FINANCED RESPONSE/REMOVAL ACTIVITIES

I. IDENTIFICATION

01 STATE	02 SITE NUMBER

II. RESPONSE/REMOVAL ACTIVITIES

01 TYPE OF ACTIVITY *(Check one)*
☐ A. REMEDIAL RESPONSE ☐ B. PLANNED REMOVAL ☐ C. IMMEDIATE REMOVAL

02 RESPONSE/REMOVAL ACTIVITY

03 LEAD AGENCY

04 PARTICIPATING AGENCIES

05 START DATE	06 EST. COMP. DATE	07 ACTUAL COMP. DATE	08 ESTIMATED COST	09 ACTUAL COST
MONTH DAY YEAR	MONTH DAY YEAR	MONTH DAY YEAR		

10 SOURCES OF FUNDING
A. SOURCE _____ AMOUNT _____ B. SOURCE _____ AMOUNT _____

11 NARRATIVE DESCRIPTION

12 SOURCE OF INFORMATION

---

01 TYPE OF ACTIVITY *(Check one)*
☐ A. REMEDIAL RESPONSE ☐ B. PLANNED REMOVAL ☐ C. IMMEDIATE REMOVAL

02 RESPONSE/REMOVAL ACTIVITY

03 LEAD AGENCY

04 PARTICIPATING AGENCIES

05 START DATE	06 EST. COMP. DATE	07 ACTUAL COMP. DATE	08 ESTIMATED COST	09 ACTUAL COST
MONTH DAY YEAR	MONTH DAY YEAR	MONTH DAY YEAR		

10 SOURCES OF FUNDING
A. SOURCE _____ AMOUNT _____ B. SOURCE _____ AMOUNT _____

11 NARRATIVE DESCRIPTION

12 SOURCE OF INFORMATION

---

01 TYPE OF ACTIVITY *(Check one)*
☐ A. REMEDIAL RESPONSE ☐ B. PLANNED REMOVAL ☐ C. IMMEDIATE REMOVAL

02 RESPONSE/REMOVAL ACTIVITY

03 LEAD AGENCY

04 PARTICIPATING AGENCIES

05 START DATE	06 EST. COMP. DATE	07 ACTUAL COMP. DATE	08 ESTIMATED COST	09 ACTUAL COST
MONTH DAY YEAR	MONTH DAY YEAR	MONTH DAY YEAR		

10 SOURCES OF FUNDNG
A. SOURCE _____ AMOUNT _____ B. SOURCE _____ AMOUNT _____

11 NARRATIVE DESCRIPTION

12 SOURCE OF INFORMATION

---

01 TYPE OF ACTIVITY *(Check one)*
☐ A. REMEDIAL RESPONSE ☐ B. PLANNED REMOVAL ☐ C. IMMEDIATE REMOVAL

02 RESPONSE/REMOVAL ACTIVITY

03 LEAD AGENCY

04 PARTICIPATING AGENCIES

05 START DATE	06 EST. COMP. DATE	07 ACTUAL COMP. DATE	08 ESTIMATED COST	09 ACTUAL COST
MONTH DAY YEAR	MONTH DAY YEAR	MONTH DAY YEAR		

10 SOURCES OF FUNDING
A. SOURCE _____ AMOUNT _____ B. SOURCE _____ AMOUNT _____

11 NARRATIVE DESCRIPTION

12 SOURCE OF INFORMATION

DATE:

SUBJECT: TSCA Site Inspection Report:
Louisiana Pacific Corp., Arcata, CA
Louisiana Pacific Corp., Samoa, CA

FROM: Sandy Avol, Field Investigator, EPA Region 9

TO: Bob Mandel, Chief, Field Inspections Section, EPA Region 9

Report #TSC 15(82) 11, 12

Facility Contact: A. Kelly Stalker, Corporate Environmentalist

Background:

The Louisiana Pacific Corporation was selected for inspection by the EPA Region 9 Field Inspections Section. This selection was based on the facility's size, as well as their use of large amounts of electrical equipment potentially containing PCBs.

Louisiana Pacific is a logging and manufacturing corporation. The company owns one hundred mills in seventeen states, twenty-five of which are located in California. There are also five manufacturing facilities in California: the Big Lagoon Saw Mill, the Carlotta Redwood Sawmill, the Alderpoint Pulp Mill, the Arcata Particle Board Facility and the Samoa Complex-Power Generation Plant.

Inspection:

On March 12, 1982, Daniel Horgan and I arrived at the Louisiana Pacific, Samoa facility, and presented our credentials to A. Kelly Stalker, Corporate Environmentalist. We then issued a TSCA Notice of Inspection and TSCA Confidentiality Notice and explained the purpose of our inspection. Mr. Stalker explained that only the Samoa and Arcata Manufacturing facilities contained electrical equipment owned by Louisiana Pacific. Equipment at the other three facilities is owned by Pacific Gas and Electric Company.

Record Keeping:

Mr. Stalker had a copy of his annual PCB report for 1980. In addition, complete logs were kept tracking all electrical equipment at each mill. Company policy dictated that the electrical superintendents at each facility were required to send Mr. Stalker quarterly reports on the status of all equipment and this information was documented in the logs.

Samoa

A facility walk-through ensued after the record review at the Samoa facility. Daniel Horgan and I were accompanied by Mr. Stalker and Hobart Kline, electrical superintendent. Mr. Stalker stated that Samoa contained 209 capacitors, 22 transformers and 4 rectifiers. If not otherwise known, this equipment was assumed to contain PCB.

We were then led into the PCB storage area. The room was fully enclosed and contained a large concrete tub for storage (see photos 1 and 2). There was one drum in storage during the time of inspection. We then went into the High Voltage Capacitor Room. Two banks of capacitors were on line but not properly marked according to 40 CFR 761.20 (see photo 3). Kline explained that there had been a capacitor blow-out. This capacitor had been removed, the concrete floor underneath was decontaminated and soil was removed adjacent to the room where the liquid had leaked through. The wall was then structurally reenforced at the base and a berm was installed inside the room as further protection (see photos 4 and 5). IT Corporation participated in this clean-up activity and the subsequent sampling.

Arcata:

Daniel Horgan and I arrived at the Arcata facility on the afternoon of March 12, 1982. The Arcata facility was not in operation during the time of inspection due to the economic situation of the particle board industry. The Arcata facility contained 14 transformers according to Stalker. A facility walk through was conducted and a General Electric Pyranol Transformer was noted with apparent leaks (see photos 6, 7, and 8).

A closing conference was then held and the Louisiana Pacific inspection was concluded.

Attachments

1) TSCA Notice of Inspection
2) TSCA Inspection Confidentiality Notice
3) Louisiana Pacific Annual PCB Report - 1980
4) EPA Region 9 site safety plan
5) Photos

LIST OF POTENTIAL VIOLATIONS

The following is a list of potential or suspected violations relevant to the Louisiana Pacific Corporation Arcata and Samoa, California facilities. The potential or suspected violations listed below are not neccessarily inclusive and any omission of other deficiences or violations shall not be binding upon the Agency.

1) Subpart B §761.10(d)(1) Disposal of PCBs and PCB items - "Spills".

   Material from a General Electric Pyranol transformer had leaked from the surface of the unit and accumulated on the flooring beneath.

2) Subpart C §761.20(c)(2)(ii) Marking of PCBs and PCB items.

   Capacitor banks located in the High Voltage Capacitor Room were not Marked with M_L.

EPA United States Environmental Protection Agency

NOTICE OF INSPECTION

Daniel A. Morgan
Inspector Name and Address

EPA Region IX, 215 Fremont Street
San Francisco, CA 94105

Inspector's Signature

Daniel A. Morgan

Title

Field Investigator

Name of Firm

Louisiana - Pacific

Firm Address

PO Box 158
Samoa, CA 95564

Date 12 March 1982 Time 9 AM

Name and Title of Recipient

Kelly Stalker

Signature of Recipient

K. Kelly Stalker

REASON FOR INSPECTION

Under the authority of Section 11 of the Toxic Substances Control Act

☑ For the purpose of inspecting (including taking samples, photographs, statements, and other inspection activities) an establishment, facility, or other premises in which chemical substances or mixtures or articles containing same are manufactured, processed or stored, or held before or after their distribution in commerce (including records, files, papers, processes, controls, and facilities) and any conveyance being used to transport chemical substances, mixtures, or articles containing same in connection with their distribution in commerce (including records, files, papers, processes, controls and facilities) bearing on whether the requirements of the Act applicable to the chemical substances, mixtures, or articles within or associated with such premises or conveyance have been compiled with.

☐ In addition, this inspection extends to (circle appropriate letters):

(A) Financial data
(B) Sales data
(C) Pricing data
(D) Personnel data
(E) Reserach data

The nature and extent of inspection of such data specified in A through E above as follows:

EPA-IX-Form 851

United States Environmental Protection Agency

TSCA Inspection Confidentiality Notice

Inspector Name: Sandy Avol

Inspector Address:
EPA Region IX
215 Fremont Street
San Francisco, CA 94105

Title: Field Investigator

Name of Individual to Whom Notice Given: Kelly Stalker

Facility: Louisiana Pacific

Facility Address:
PO Box 158
Samoa CA 95564

Chief Executive Officer of Firm: Harry McFarland

Title: President Chairman

Address: 1300 Southwest 5th Ave. Portland 97201

Title: Corporate Environmentalist

It is possible that EPA will receive public requests for release of the information obtained during inspection of the facility above. Such requests will be handled by EPA in accordance with provisions of the Freedom of Information Act (FOIA), 5 U.S.C. 552; EPA regulations issued thereunder, 40 CFR Part 2; and the Toxic Substances Control Act, Section 14. EPA is required to make inspection data available in response to FOIA requests unless the Administrator of the Agency determines that the data contains information entitled to confidential treatment.

Any or all the information collected by EPA during the inspection may be claimed confidential if it relates to trade secrets or commercial or financial matters that you consider to be confidential. If you make claims of confidentiality, EPA will disclose the information only to the extent, and by means of the procedures, set forth in the regulations (cited above) governing EPA's treatment of confidential information. Among other things, the regulations require that EPA notify you in advance of publicly disclosing any information you have claimed and certified confidential.

To Claim Confidential Information

To claim information confidential, you must certify that each claimed item meets all of the following criteria:

1. Your company has taken measures to protect the confidentiality of the information, and it intends to continue to take such measures.
2. The information is not, and has not been, reasonably obtainable without your company's consent by other persons (other than governmental bodies) by use of legitimate means (other than discovery based on a showing of special need in a judicial or quasi-judicial proceeding).
3. The information is not publicly available elsewhere.
4. Disclosure of the information would cause substantial harm to your company's competitive position.

At the completion of the inspection, you will be given a receipt for all documents, samples, and other materials collected. At that time, you may make claims that some or all of the information is confidential and meets the four criteria listed above.

If you are not authorized by your company to make confidentiality claims, this notice will be sent by certified mail, along with the receipt for documents, samples, and other materials to the Chief Executive Officer of your firm within two days of this date. The Chief Executive Officer must return a statement specifying any information which should receive confidential treatment.

The statement from the Chief Executive Officer should be addressed to: Kirby Narcisse, TSCA Document Control Officer, US EPA Region IX
Hazardous Materials Section (A32)
215 Fremont Street
San Francisco, CA 94105
and mailed by registered, return-receipt-requested mail within seven (7) calendar days of receipt of this Notice.

Failure by your firm to submit a written request that information be treated as confidential, either at the completion of the inspection or by the Chief Executive Officer within the seven-day period, will be treated by EPA as a waiver by your company of any claims for confidentiality regarding the inspection data.

To be completed by facility official receiving this notice

I have received and read this Notice.

Name: A. Kelly Stalker

Title: Corporate Environmentalist

Signature: A. Kelly Stalker

Date: 3/12/82

If there is no one on the premises of the facility who is authorized to make business confidentiality claims for the firm, a copy of this Notice and other inspection materials will be sent to the company's chief executive officer. If there is another company official who should also receive this information, please designate below.

Name

Title

Address

EPA-IX-Form 850

Louisiana-Pacific Corporation

Interdepartmental Communication

date: June 5, 1980

to: File location:

from: A. Kelly Stalker location: Samoa

subject: ANNUAL PCB REPORT

No PCB's were disposed of during the last 12 months.

There are 228 transformers in use which contain approximately 297,340 Kg of PCB. Many of these transformers are not labeled by the manufacturer so in the absence of data, they are assumed to contain PCB.

There are 457 capacitors in service. The manufacturers' labels do not give the quantity of PCB's contained in each unit. A total of 440 Kg of PCB are known to be in some of these units.

The following transformers were removed from the logs when analyses showed PCB concentrations of less than 50 ppm.

MILL LOCATION	PCB LOG PAGE	ITEM NUMBERS
Ward Cove	1	1
" "	3	47
" "	4	51-53
Seward	1	4-6
Thorne Bay	1	4-6
"	2	21-25
Truckee	1	13
"	2	14-18

On December 15, 1980, Ward Cove removed from service transformers #40 on log page 3.

The following PCB units were reported placed in storage for spares.

MILL LOCATION	TYPE OF UNIT	LOG PAGE NUMBER	ITEM NUMBER
Sandpoint	Capacitor	1	6
Truckee	Transformers	1	2&3
"	"	1	9-12

AKS

MAP 9-3 5-1-81 RMT

DRAFT

EPA REGION 9
SURVEILLANCE & ANALYSIS DIVISION
AIR & HAZARDOUS MATERIALS BRANCH
HAZARDOUS MATERIALS SECTION

SAFETY PLAN FOR RCRA INVESTIGATIONS

Site: Pacific Lumber, Georgia Pacific Location: Humboldt Co., Trinity, Shast
Water Power Resource Service

Purpose: TSCA Facility Investigations/State PCB Grant Overvie

I. Physical Description of Site:

A. Describe site layout, include method(s) of chemical storage (i.e. - warehouse, evaporation ponds, drums, etc.). Also note whether heavy equipment (lift trucks, trucks, tractors, etc.) is operated in the storage area.

P.L.: redwood lumber mill

G.P.

NAPRS: PCB storage area w/electrical equip & drums; hi voltage elect. equip.

B. Indicate which of the following information sources were consulted in preparing IA: State and/or Local Agency, State and/or Federal OSHA, NIOSH, EPA files, Site Operator and Local Fire Dept. Note: a minimum of two sources are required.

spill report notices; facility operators; EPA files

II. Health and Safety Considerations

Areas of Concern	Hazard Potential	Precautions
Explosion:	unknown	O_2 LEL
O_2 Deficiency:	unknown	"
Radiation:	none	
Toxic Gases:		
a. General (HNU meter)		
b. Specific: (HCN Detector Tube)		
Skin/Eye Contact:		safety glasses, gloves, coveralls
Falling Objects:		hard hats, safety ho
Falls:		

DRAFT

III. Emergency Precau ons

A. Nearest Hospital Emergency Room (Address & Telephone):

active facility

B. Transportation (Telephone Numbers)

1. Fire: _____
2. Police: _____
3. Ambulance: _____

C. Poison Control Center: S.F. Bay Area 1-800-792-0720

D. Personal First Aid: _____

E. On-Site Alarms: _____

IV. Equipment Checkout

Personal Protective Equipment

Personal Clothing, Level "D":	✓
Coveralls - Chemical Resistant:	✓
Boots/Shoes - Safety Steel Toed:	✓
Boots - Reusable, Chem. Resistant - Steel Toe:	✓
Boots - Outer, Chem. Resistant Throw-Away:	✓
Robert Shaw Escape Mask:	
Safety Glasses or Goggles:	✓
Hard Hat (Face Shield Optional):	✓
Gloves	✓
Other: _____	

Emergency Equipment

First Aid Kit:	
Eye Wash Kit:	
Drinking Water Supply:	

Survey Equipment

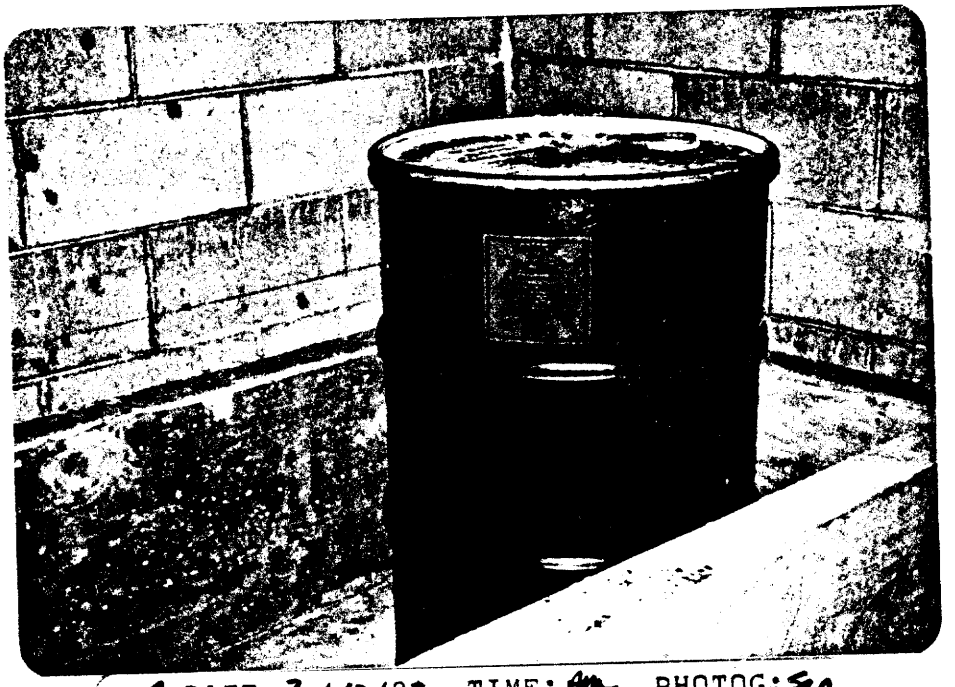
Explosimeter:	✓
O_2 Meter:	✓
Radiation Survey Meter:	
Drager Detector Tubes (HCN & others as needed):	
HNU Photoionizer:	✓
Metal Detector:	
Handie-Talkies (2-Way Radios):	

APPROVALS:

Safety Plan Prepared By: David Morgan Sandy Au C Date: 3/3/82

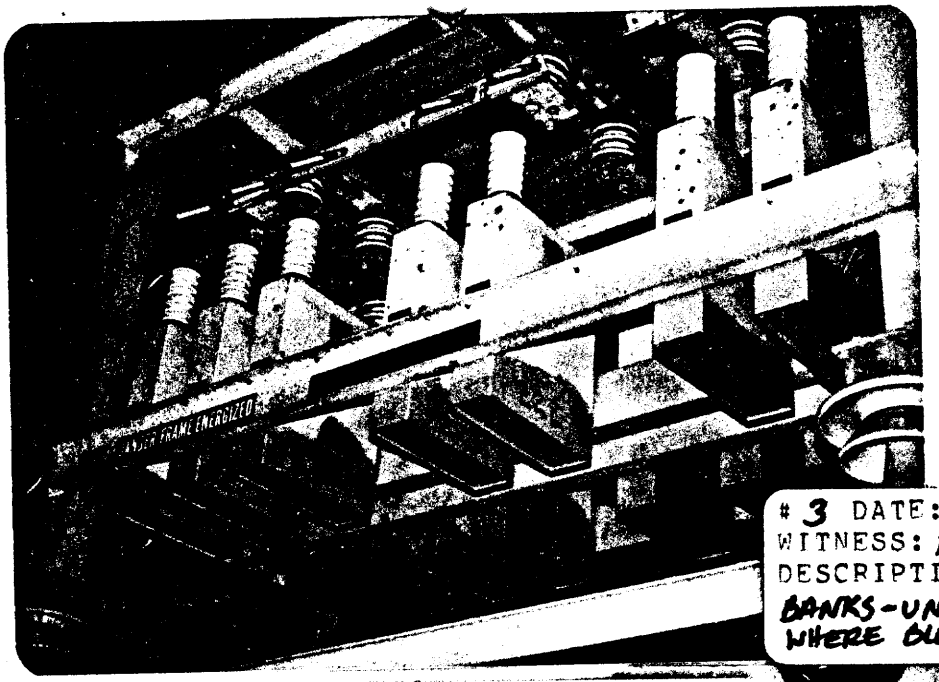
Health & Safety Officer: _____

Section Chief: Robert M Grandt 3-3-82



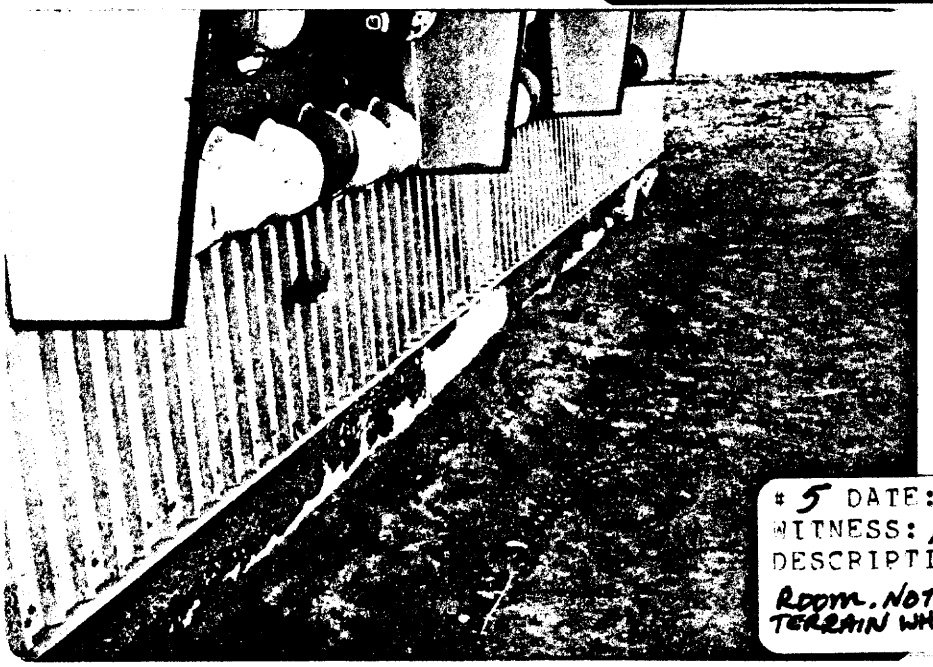
1 DATE: 3/12/82 TIME: AM PHOTOG: SA
WITNESS: HORGAN, STALKER
DESCRIPTION: PCB STORAGE AREA - SAMOA FACILITY

2 DATE: 3/12/82 TIME: AM PHOTOG: SA
WITNESS: HORGAN, STALKER
DESCRIPTION: PCB STORAGE AREA - SAMOA FACILITY



3 DATE: 3/12/82 TIME: AM PHOTOG: SLA
WITNESS: HORGAN, STALKER
DESCRIPTION: HIGH VOLTAGE CAPACITOR BANKS - UNMARKED. FRONT LINE IS SITE WHERE BLOW-OUT OCCURED. SAMOA FACILITY

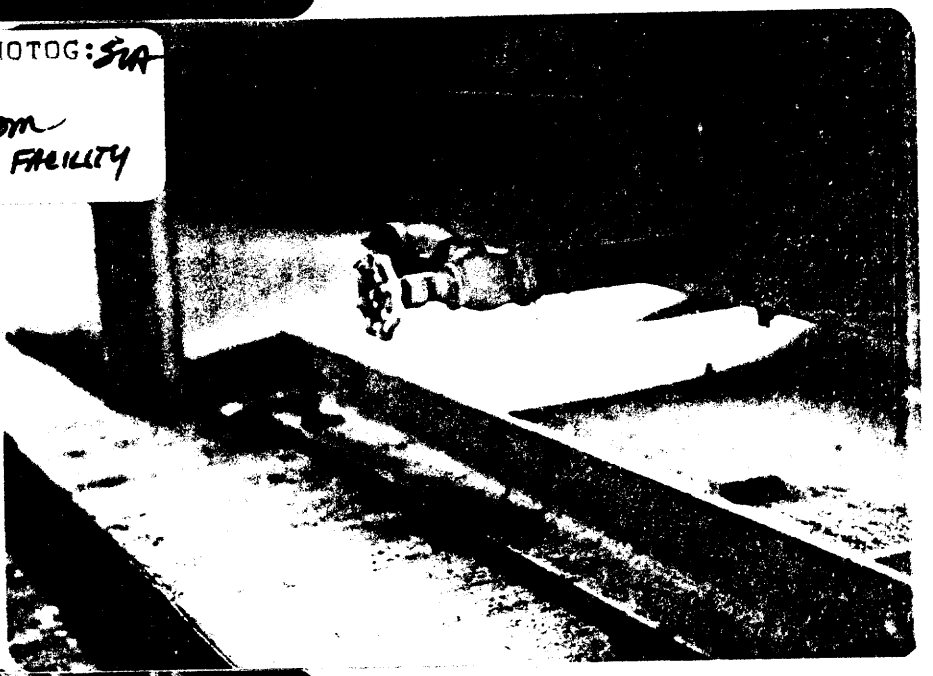
4 DATE: 3/12/82 TIME: AM PHOTOG: SLA
WITNESS: HORGAN, STALKER
DESCRIPTION: BERM INSIDE CAPACITOR ROOM. SAMOA FACILITY.



5 DATE: 3/12/82 TIME: AM PHOTOG: SLA
WITNESS: HORGAN STALKER
DESCRIPTION: VIEW OUTSIDE CAPACITOR ROOM. NOTE DIFFERENCE OF SURROUNDING TERRAIN WHERE SOIL HAD BEEN EXCAVATED FOR CLEAN-UP

6 DATE: 3/12/82 TIME: PM PHOTOG: SLA
WITNESS: HORGAN, STALKER
DESCRIPTION: GENERAL ELECTRIC PYRANOL TRANSFORMER - ARCATA FACILITY

7 DATE: 3/12/82 TIME: PM PHOTOG: SLA
WITNESS: HORGAN, STALKER
DESCRIPTION: APPARENT LEAKS FROM G.E. PYRANOL TRANSFORMER - ARCATA FACILITY



8 DATE: 3/12/82 TIME: PM PHOTOG: SLA
WITNESS: HORGAN, STALKER
DESCRIPTION: APPARENT LEAK FROM G.E. PYRANOL TRANSFORMER, - ARCATA FACILITY